

TELEFUNKEN SERVICE

AUDIOVISION
AUDIOVISION
AUDIOVISUEL

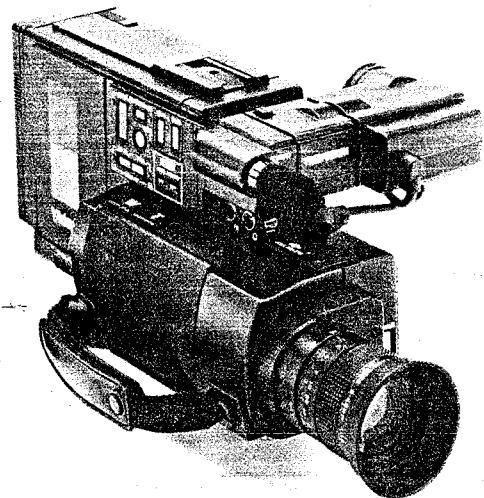
Camera-Recorder
890 movie/1890 movie

Druck-Nr. 319 482 675

und Zubehör

**Schaltpläne
Lagepläne**

**Schematic Diagrams
Component Layouts**



Schutzgebühr 10,- DM

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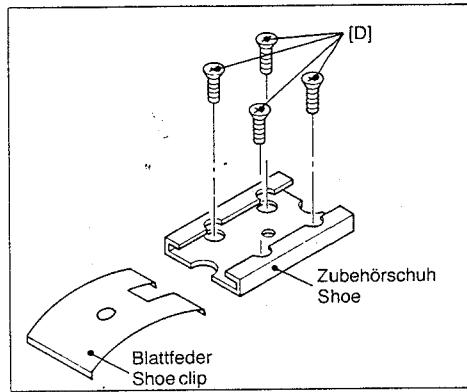
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Ausbauhinweise

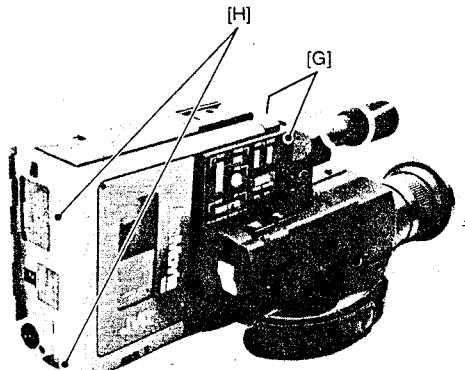
1. Gehäuse

- Zuerst die Blattfeder im Zubehörschuh anheben und herausziehen. 4 Schrauben [D] lösen und Zubehörschuh abnehmen.
- Deckplatte an den Punkten [E] anheben, um die Rastnasen zu lockern und dann in Pfeilrichtung [F] abziehen.



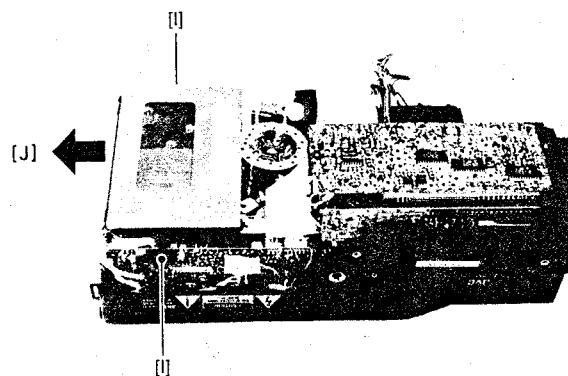
2. Gehäuse

2 Schrauben [G] und 4 Schrauben [H] herausdrehen, um die obere Gehäusehälfte von der unteren zu lösen.



3. Cassettenfach-Abdeckung

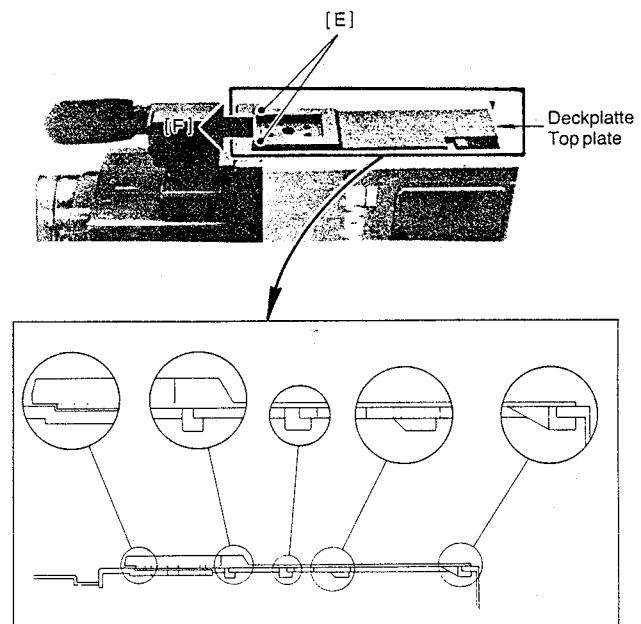
2 Schrauben [I] lösen. Cassettenfach-Abdeckung in Pfeilrichtung [J] abziehen.



Disassembly

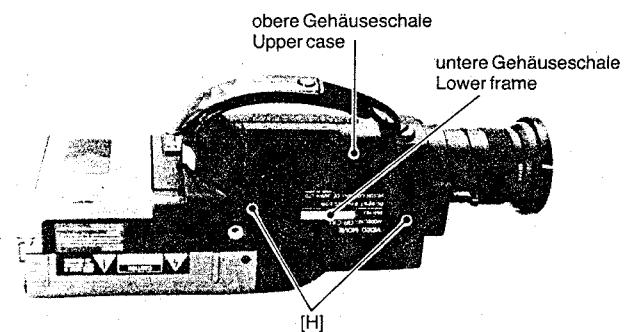
1. Top plate

- First remove the shoe clip by raising the part upwards and pulling it to the front. Then remove the 4 screws [D].
- Raise the two parts [E] of the top plate to unfasten its claws and then slide it in the direction of [F]:



2. Housing

Remove the 2 screws [G] and 4 screws [H] to partially take off the upper case from the lower frame.

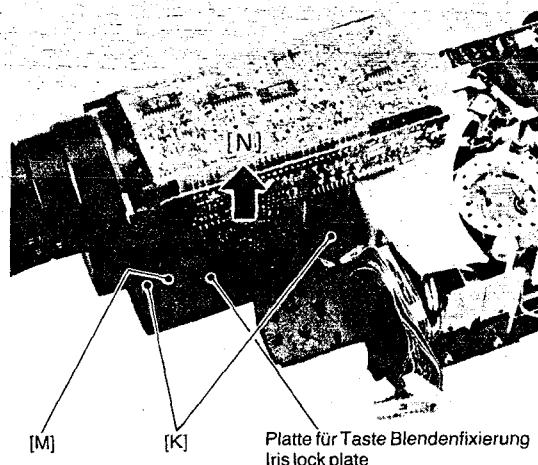


3. Cassette cover

Remove the two screws [I]. Then the cassette cover can be removed by pulling it in the direction of [J].

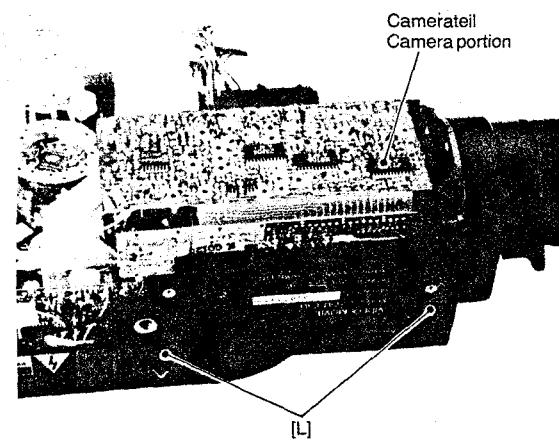
4. Camerateil

Zunächst 2 Schrauben [K] und 2 Schrauben [L] lösen. Schraube [M] lösen und die Platte für Taste Blendenfixierung in Pfeilrichtung abnehmen. Dann das Camerateil nach oben herausnehmen.



4. Camera portion

Remove the two screws [K] and two screw [L] first, and then remove a screw [M] to remove the iris lock plate by raising it upwards in the direction of [N]. After that, the camera can be removed by raising it upwards.



5. Recorderteil

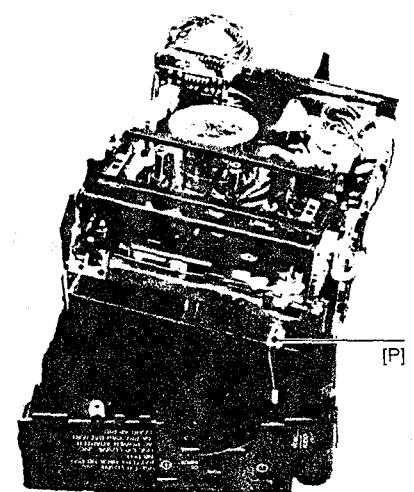
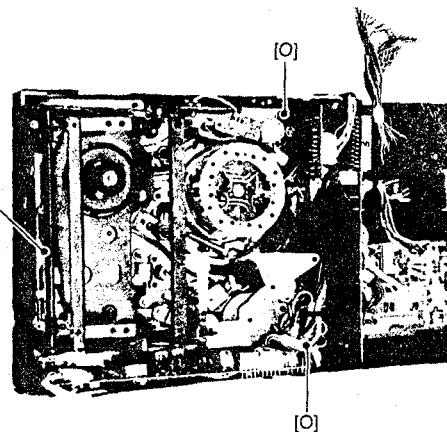
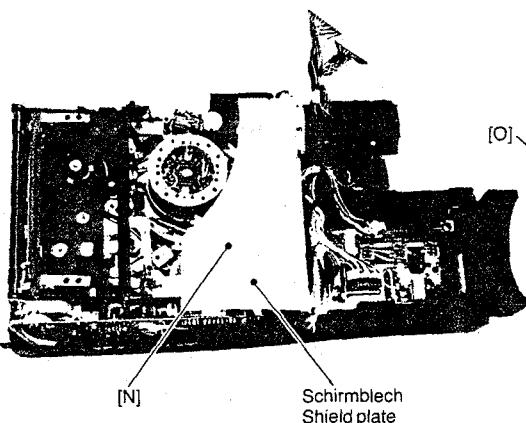
Schraube [N] und Abschirmung entfernen. 3 Schrauben [O] lösen und das Recorderteil nach oben herausnehmen (Stecker [P] abziehen).

Hinweis: Das Recorderteil sehr vorsichtig herausnehmen, um freiliegende mechanische Teile nicht zu beschädigen.

5. Tape recorder

Remove the screw [N] and the shield plate. Remove the 3 screws [O]. Then remove the deck by pulling it upwards. (Remove connector [P].)

Note: When removing the deck, pay the most careful attention not to touch the mechanism parts exposed.



6. E-E und Anzeigenplatte [2] [3]

3 Schrauben [Q] lösen und die Schaltungsplatte herausklappen.

6. E-E and Indicator board [2] [3]

Remove the three screws [Q] so that the E-E & IND board can be opened to this side.

7. Audio-Servoplatte [0] [4]

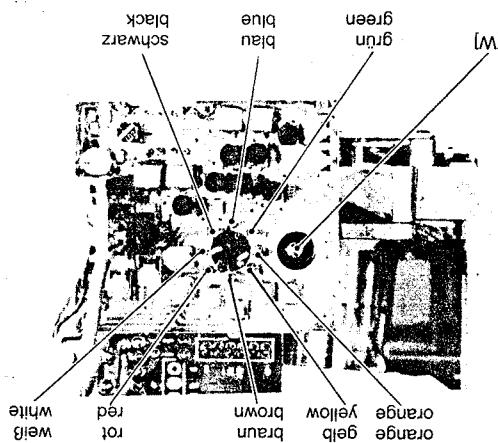
7 Stecker [R] abziehen und die Audio/Servoplatte in Pfeilrichtung [S] abziehen. Stecker für den Audio-Kopf abnehmen.

7. Audio-Servo board [0] [4]

First remove the 7 connectors [R] and then remove the AUDIO/SERVO board by pulling it in the direction of the arrow [S]. Remove the connector for the audio head.

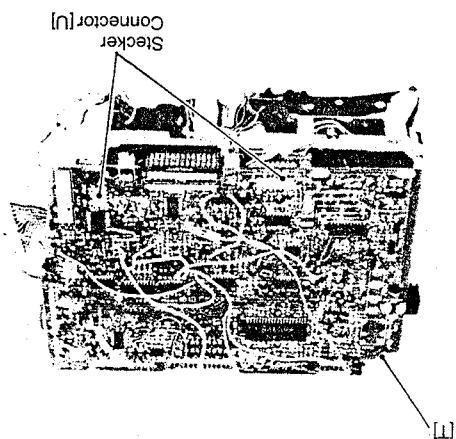
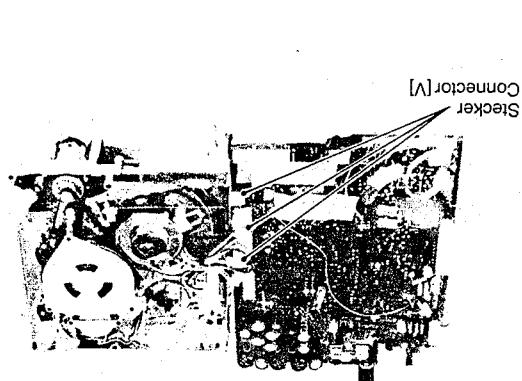
8. Videoplatte [0] [2] nach oben abziehen.

8. Video board [0] [2] Pull out in upwards direction.



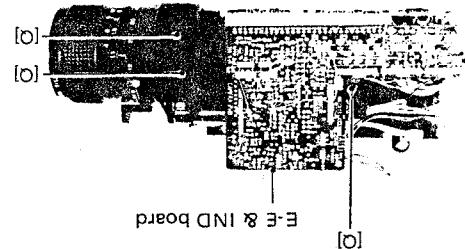
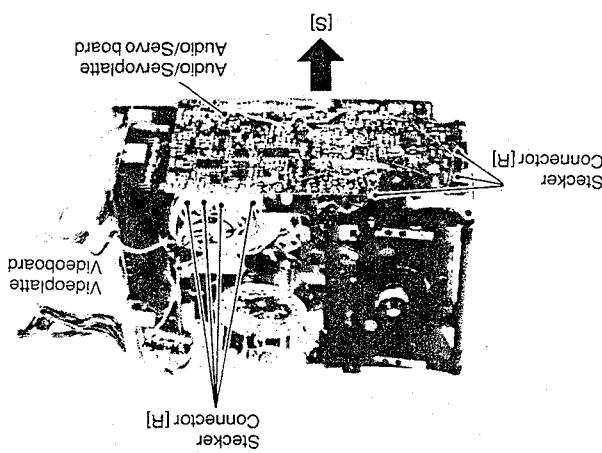
10. Drum-Preamplifier
Remove the cover of the shield case, a screw [W] and desolder the eight wires to the drum.

10. Videokopf-Vorverstärker
Abschirmung und Schraube [W] entfernen und 8 Kopfstrommezzileitungen abgleiten.



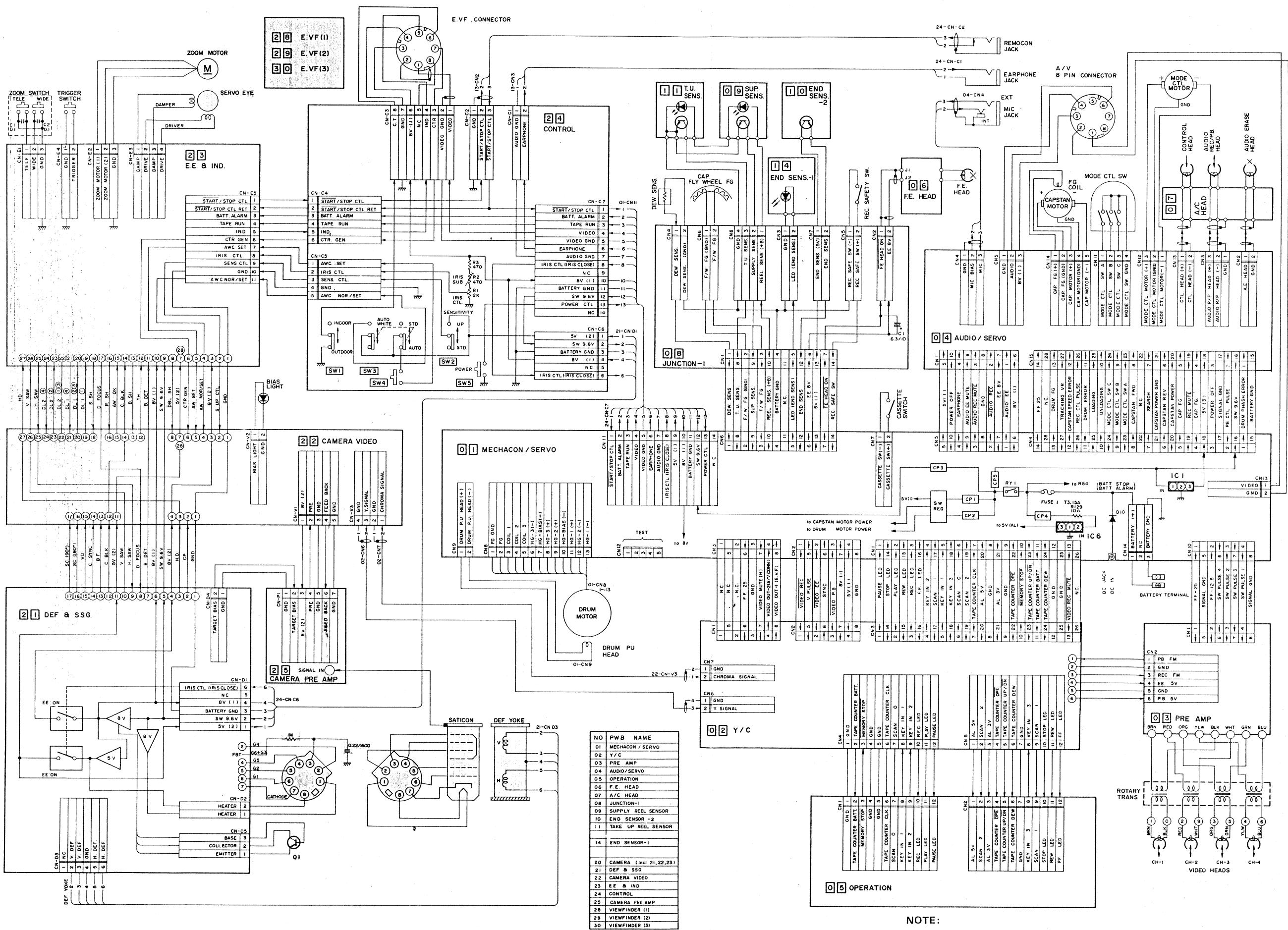
9. Mechanic/Servo board [O] [T]
Remove a screw [T] and the 2 connectors [U] to remove the MECHACON/SERVO board. Remove 3 connectors [V].

9. Plate für Servoregelung und Mechaniksteuerung [O] [T]
Eine Schraube [T] und 2 Stecker [U] entfernen und 3 Stecker [V] abziehen.



Abkürzungen · Abbreviations

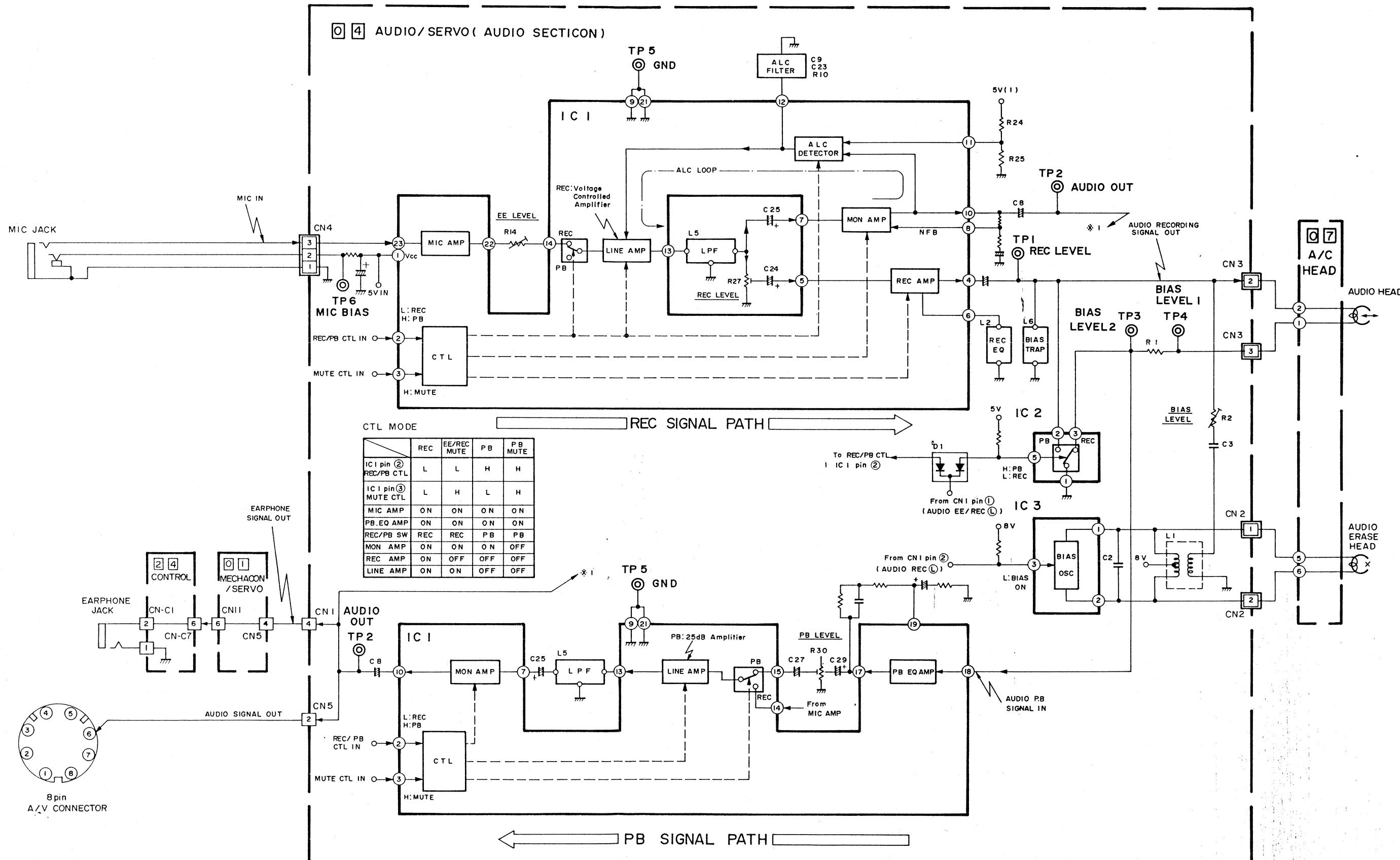
Verdrahtungsplan · Wiring Diagram



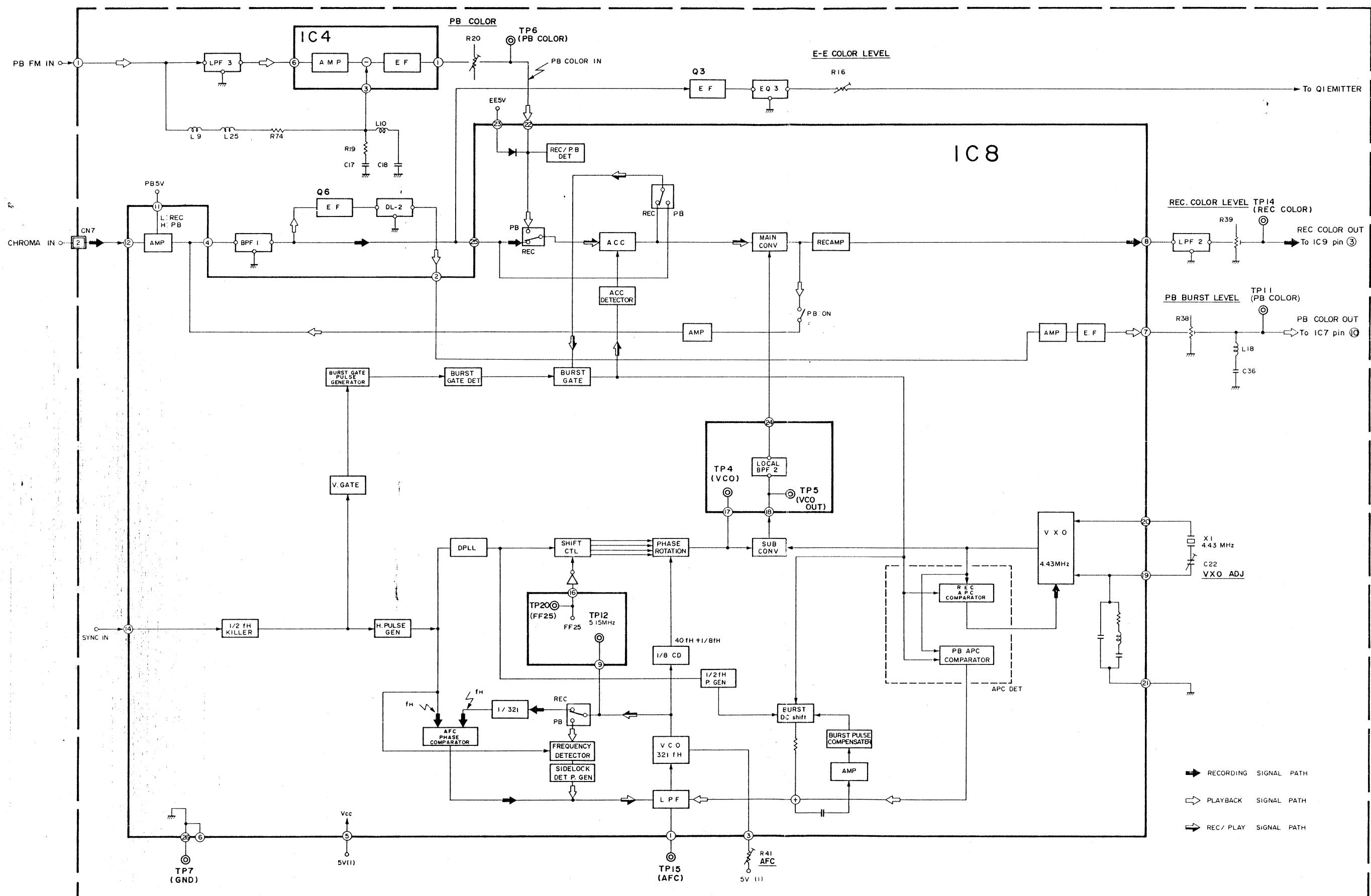
NOTE:

parts are importantly related to safety.
When replacing them, make sure to use specified parts.

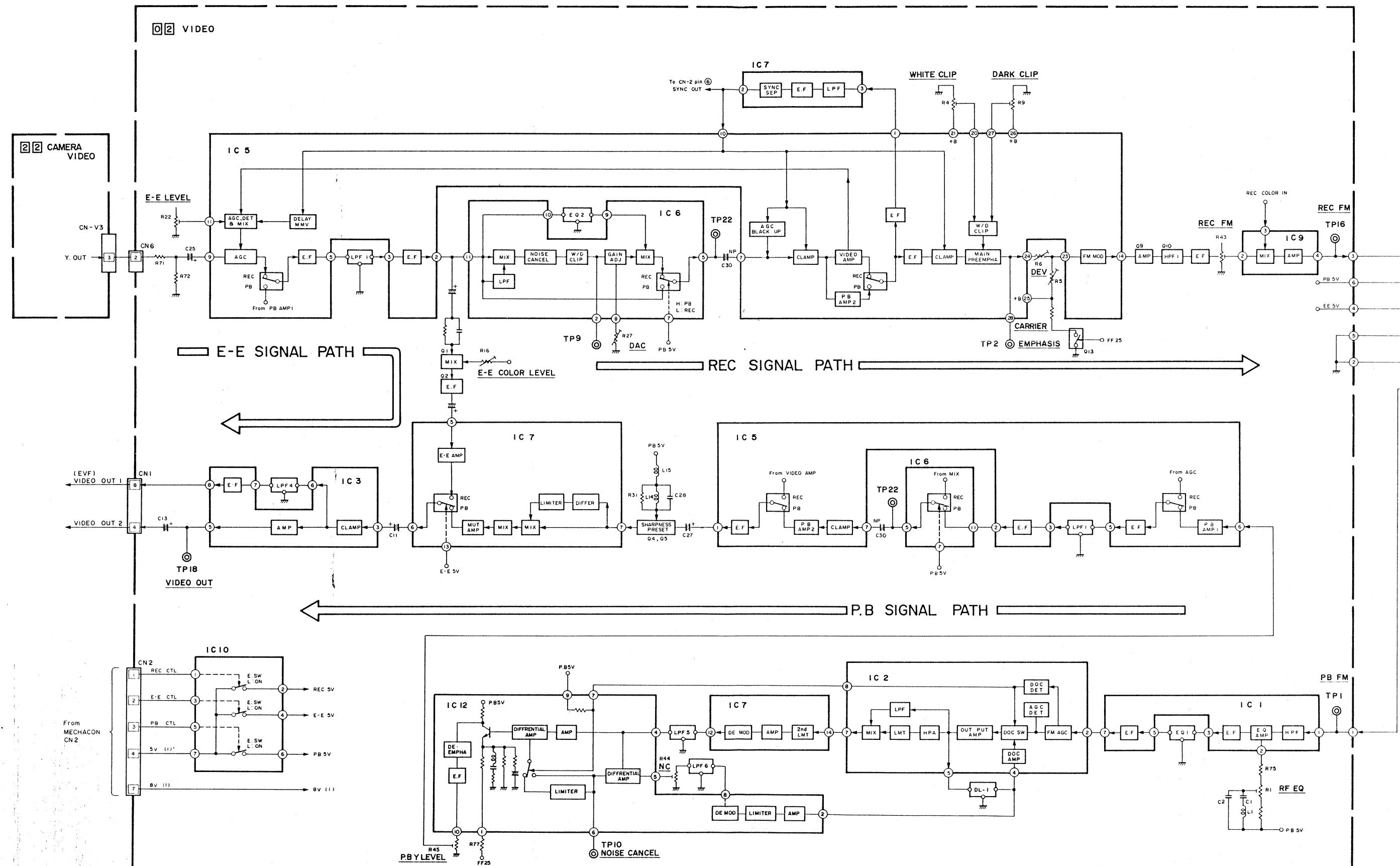
Audio-Blockschaltbild
Audio block diagram

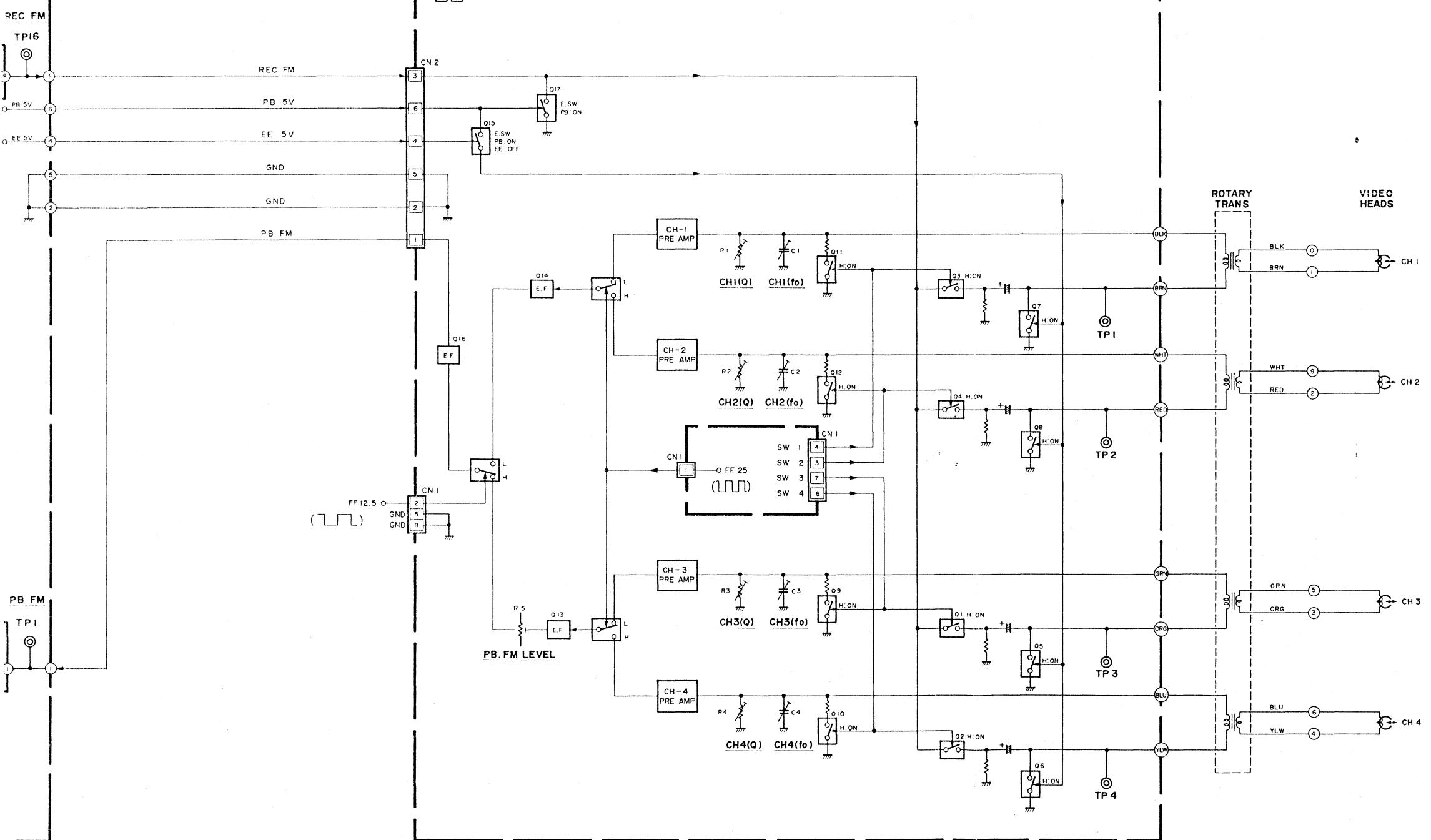


Video-Blockschaltbild (Farbsignal) Video block diagram (chroma signal)

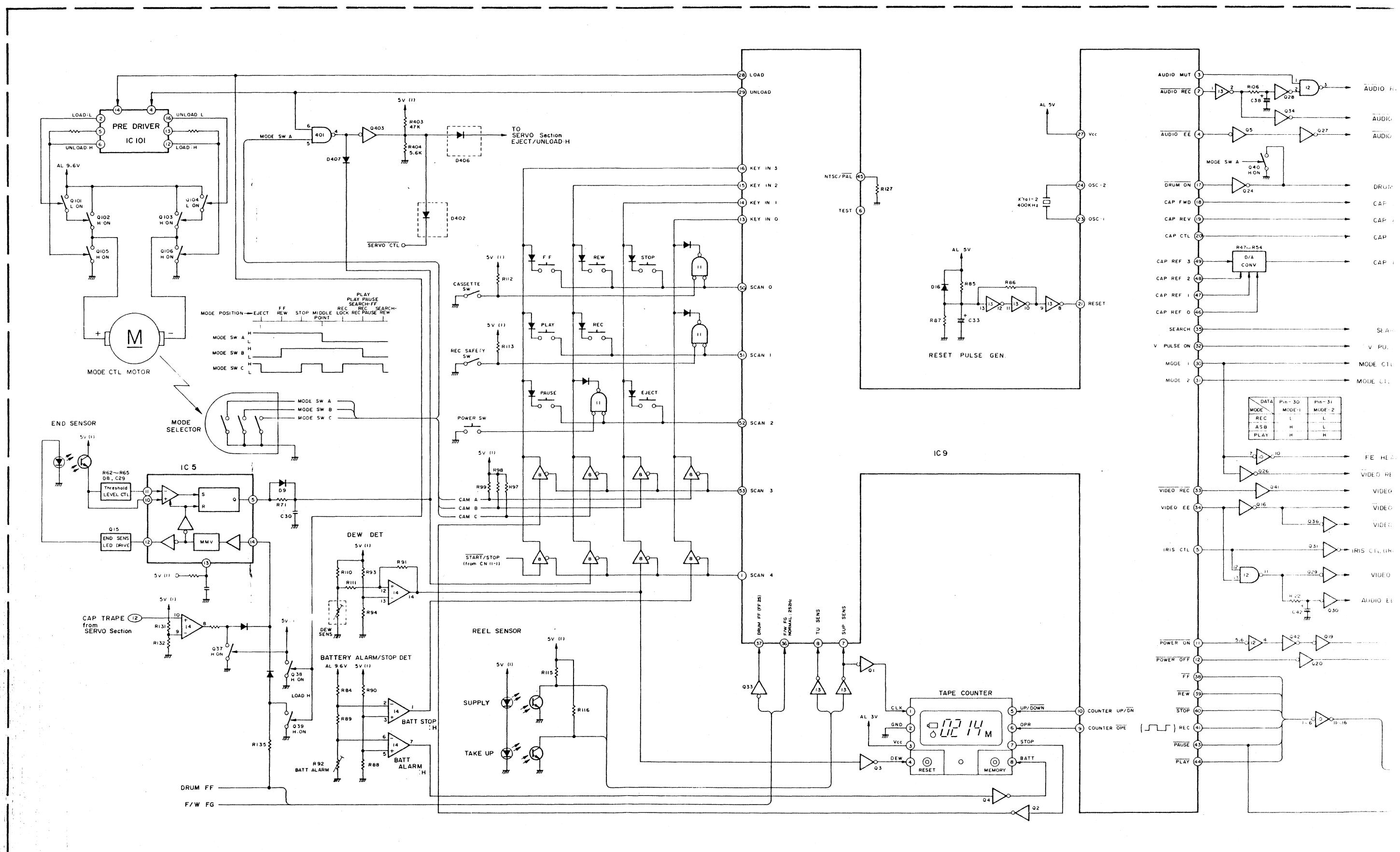


Video-Blockschaltbild (Luminanzsignal) Video block diagram (luminance signal)

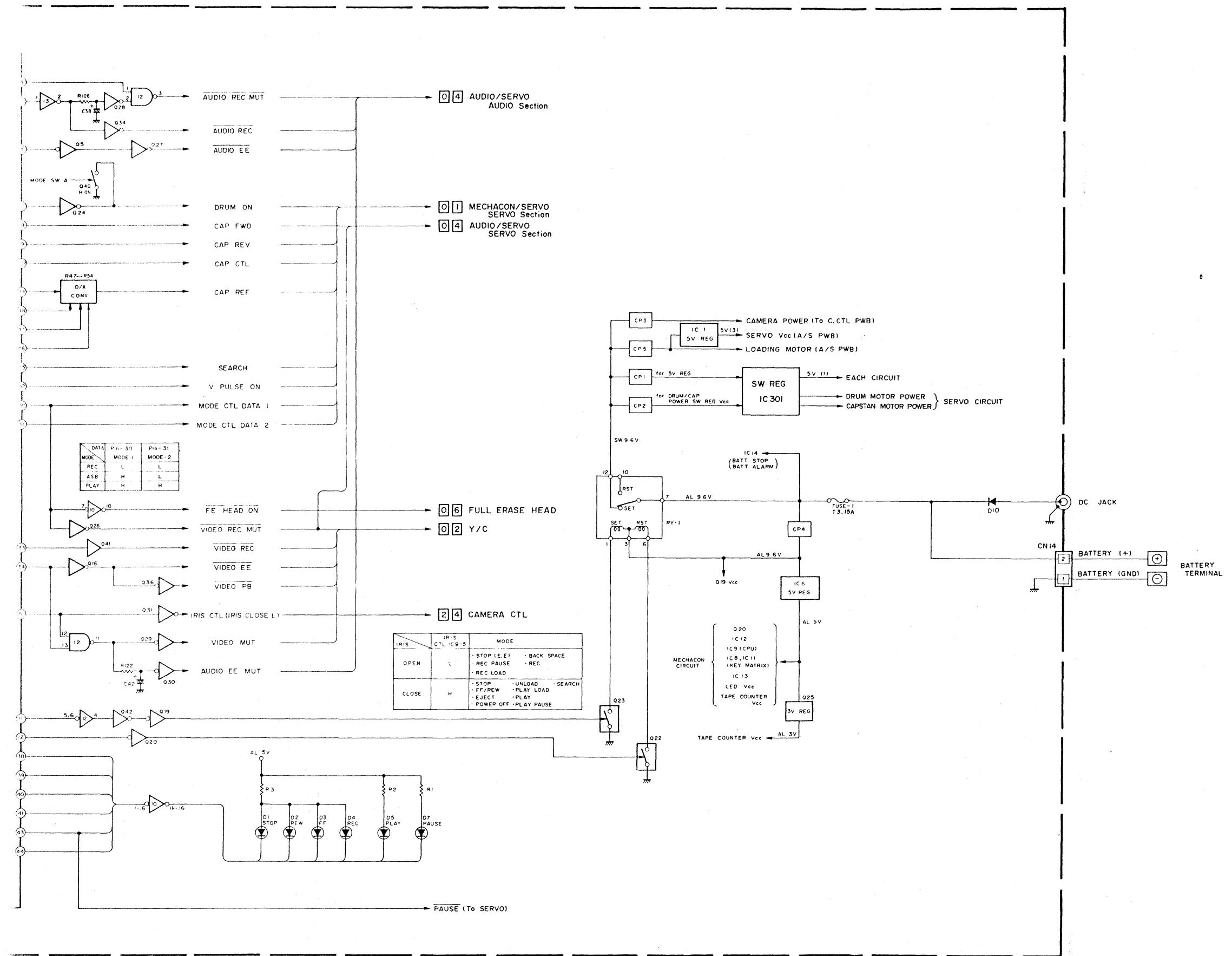




Mechaniksteuerung Blockschaltbild Mechacon block diagram

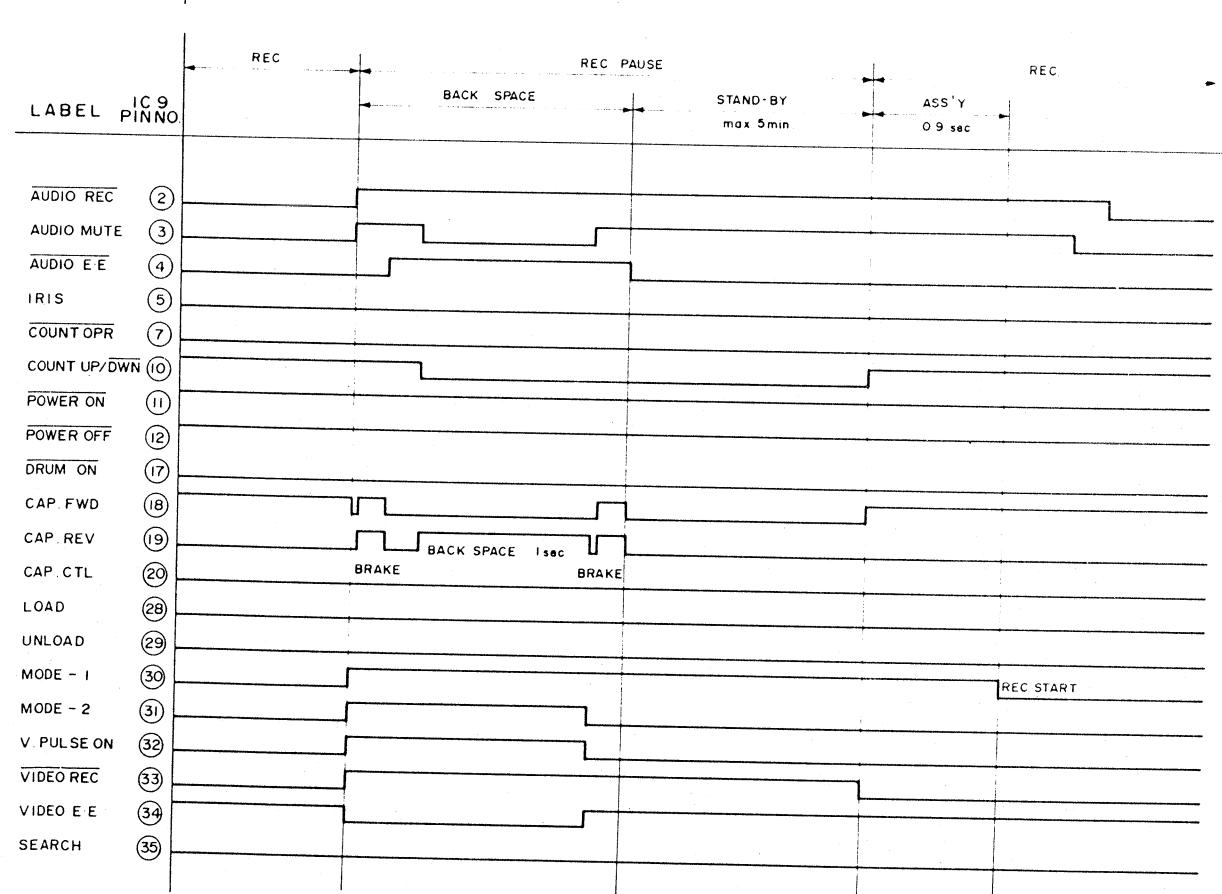
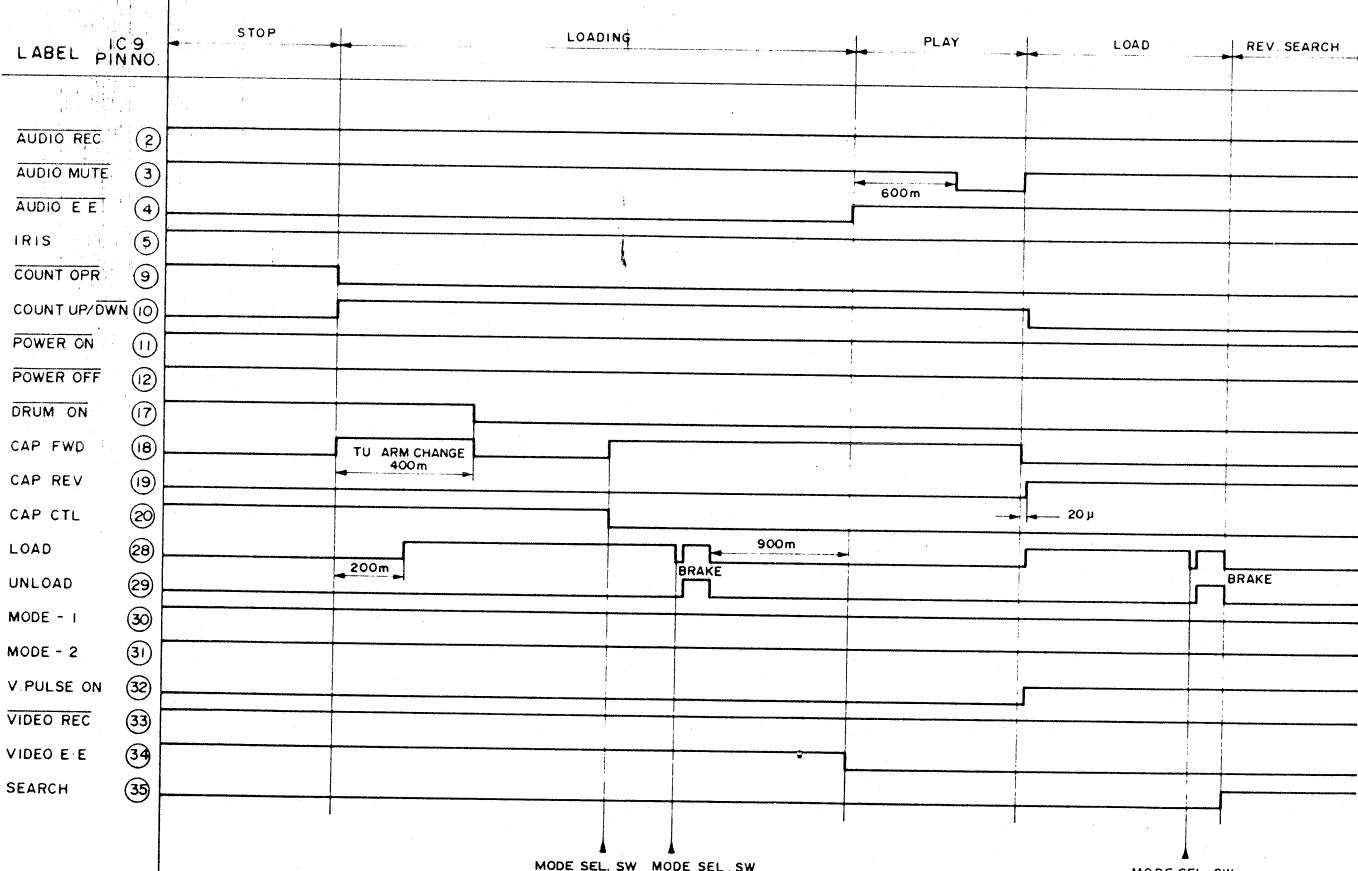
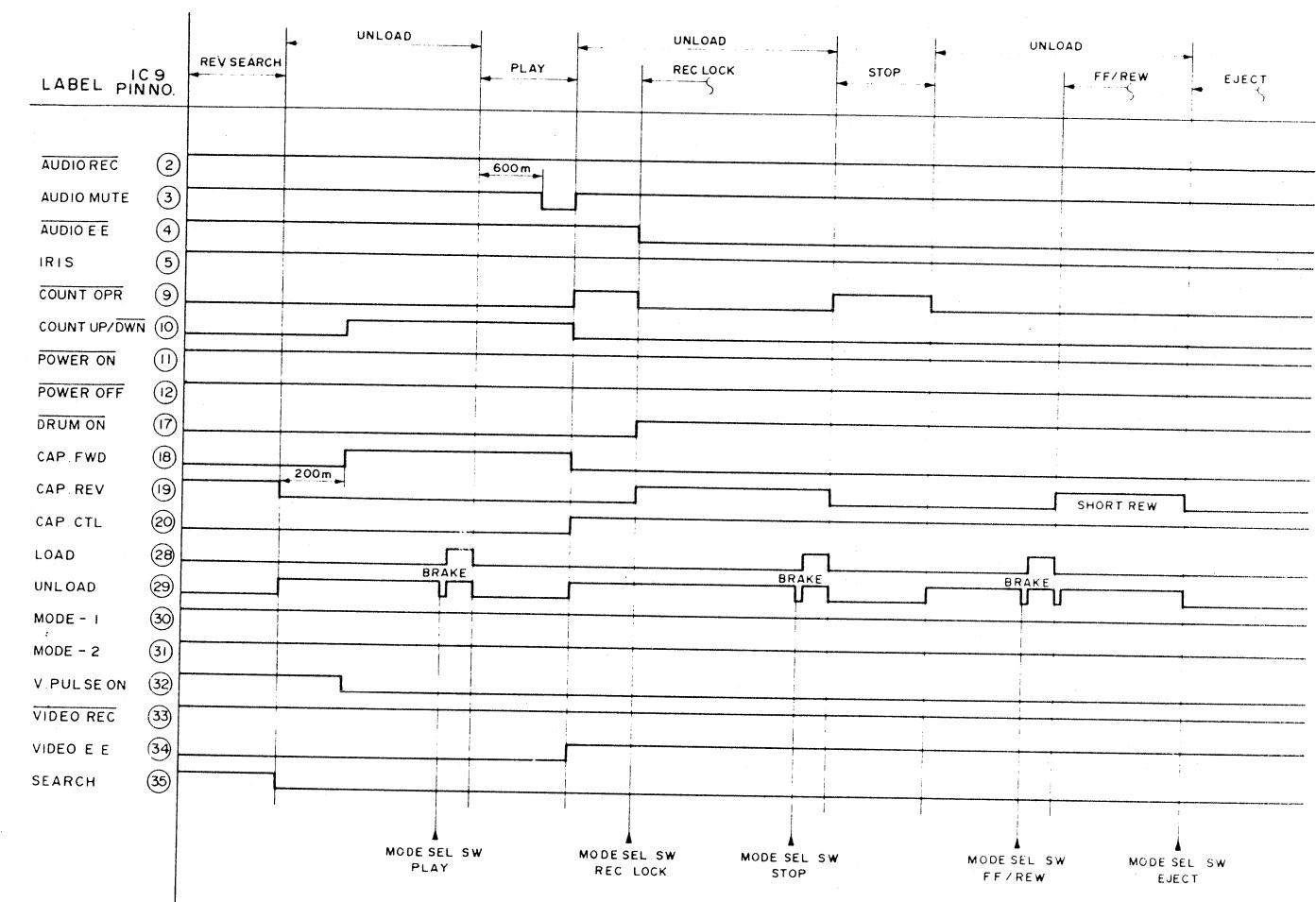
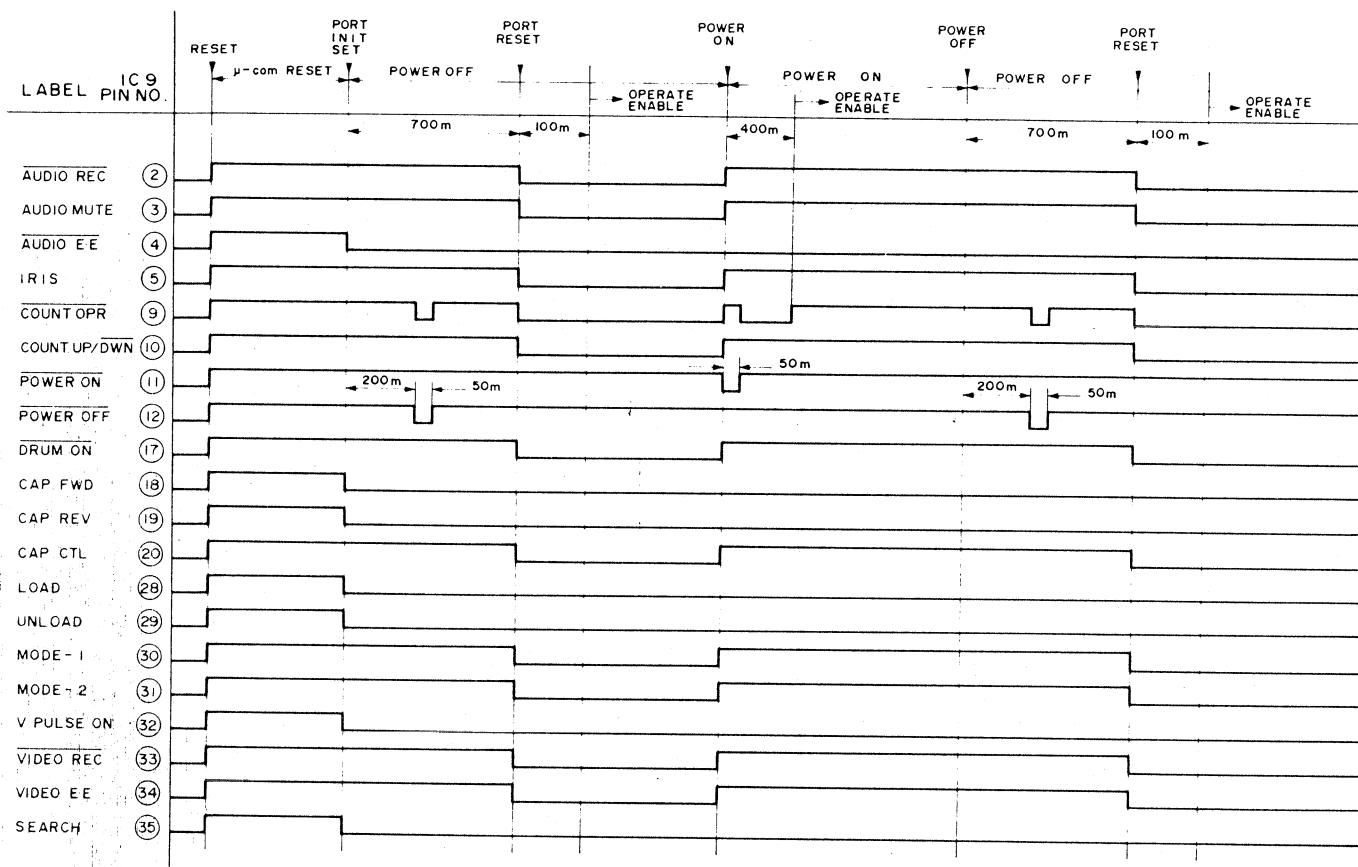


Mechaniksteuerung Blockschaltbild
Mechacon block diagram

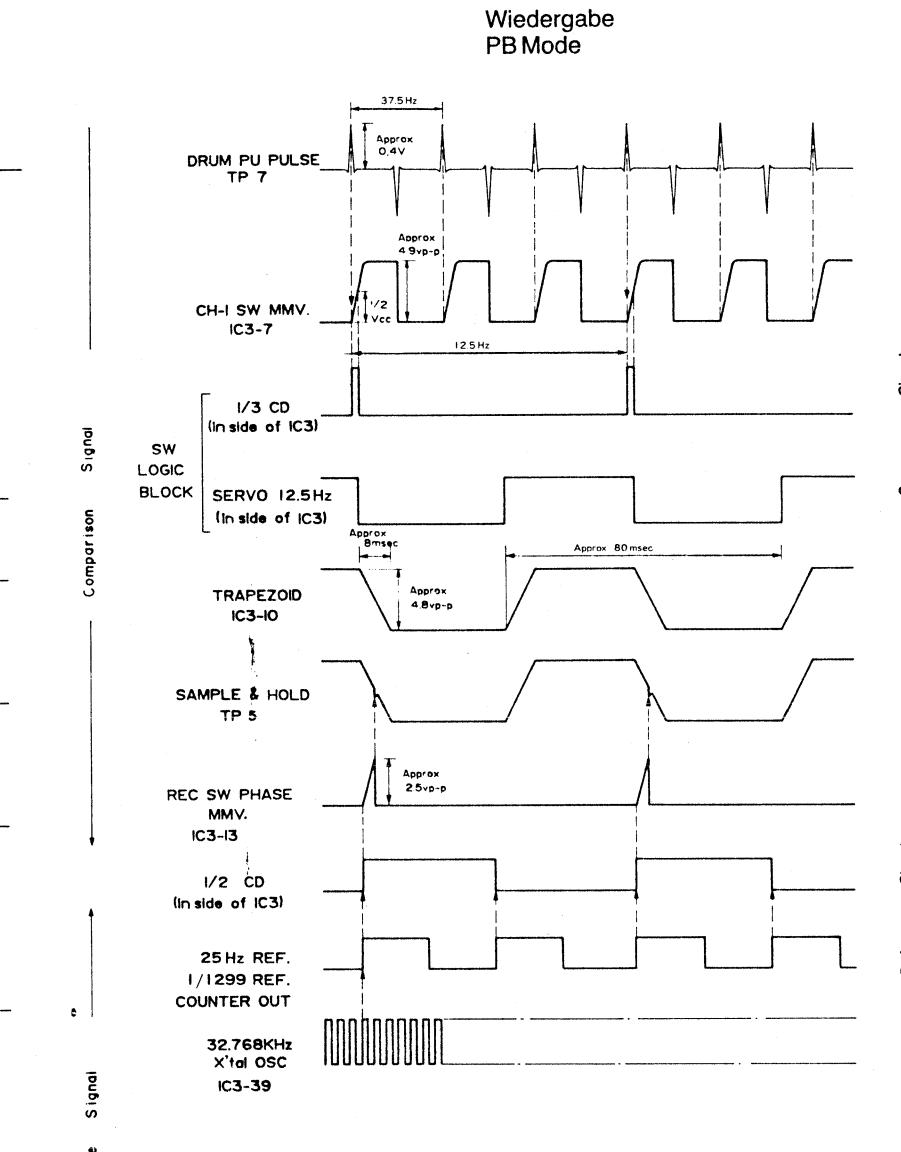
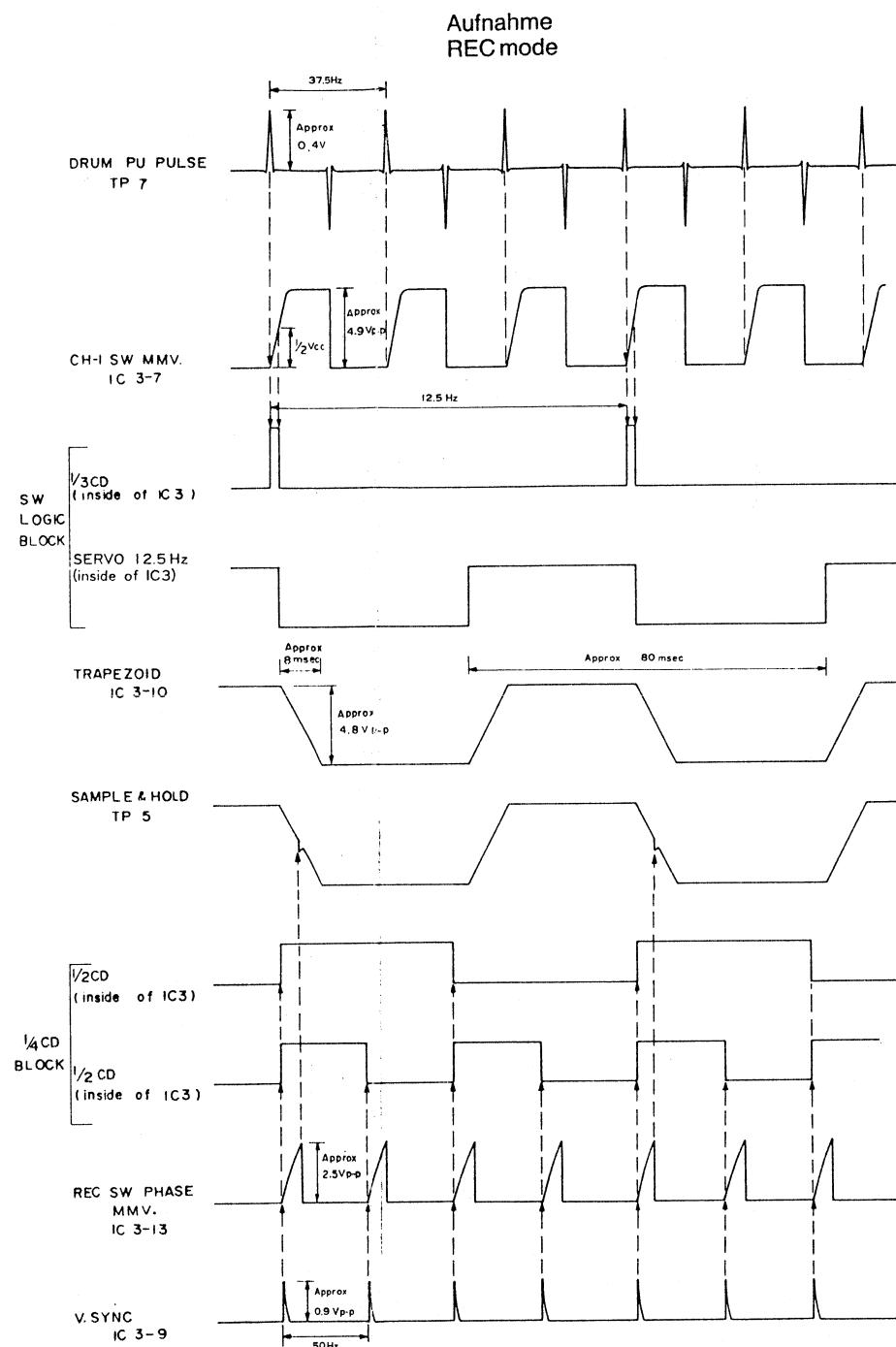
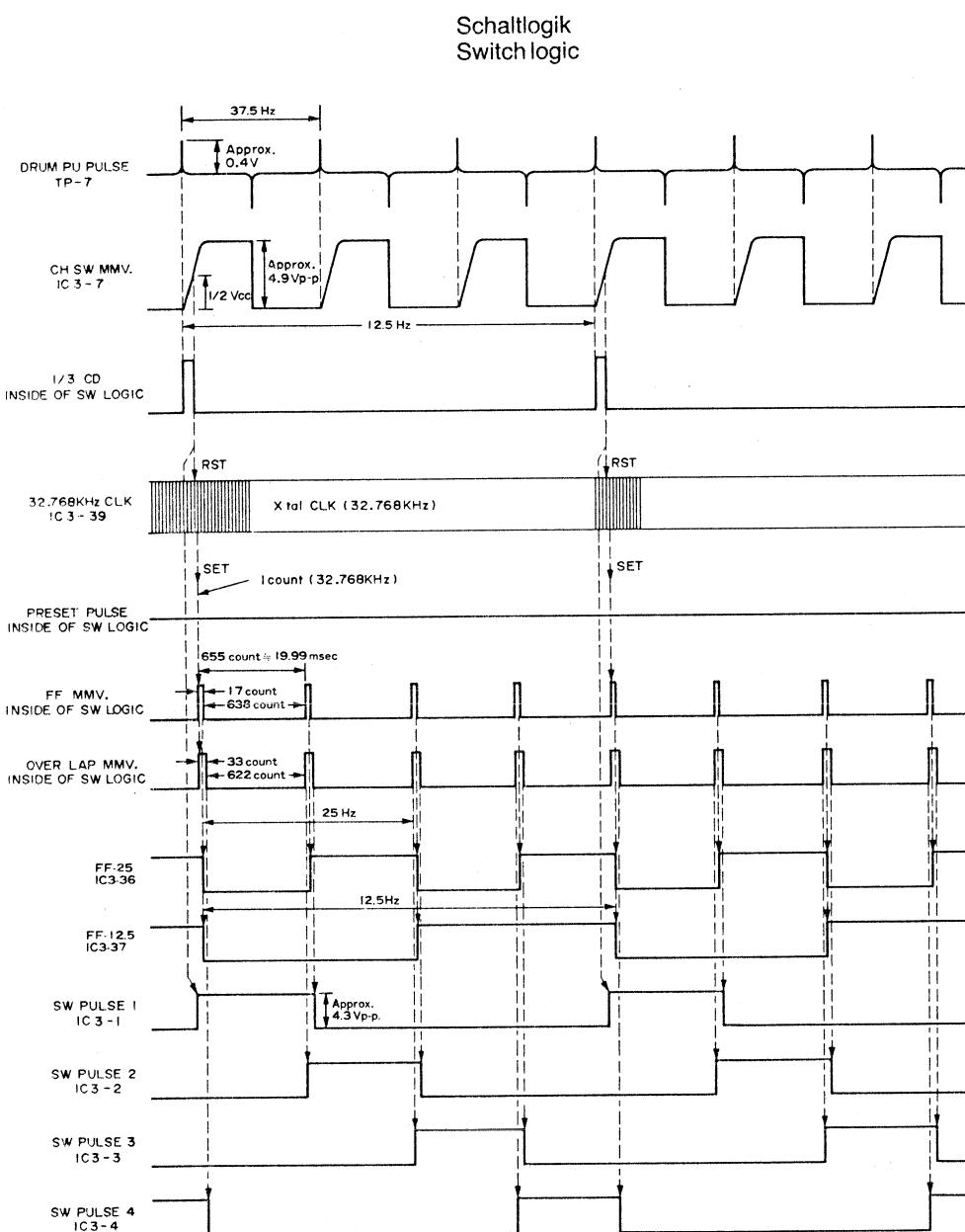


Mechaniksteuerung Impulsdiagramm

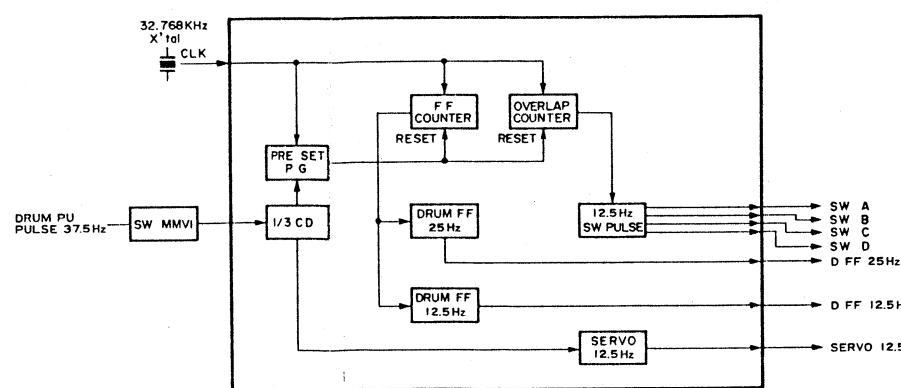
Mechacon timing chart

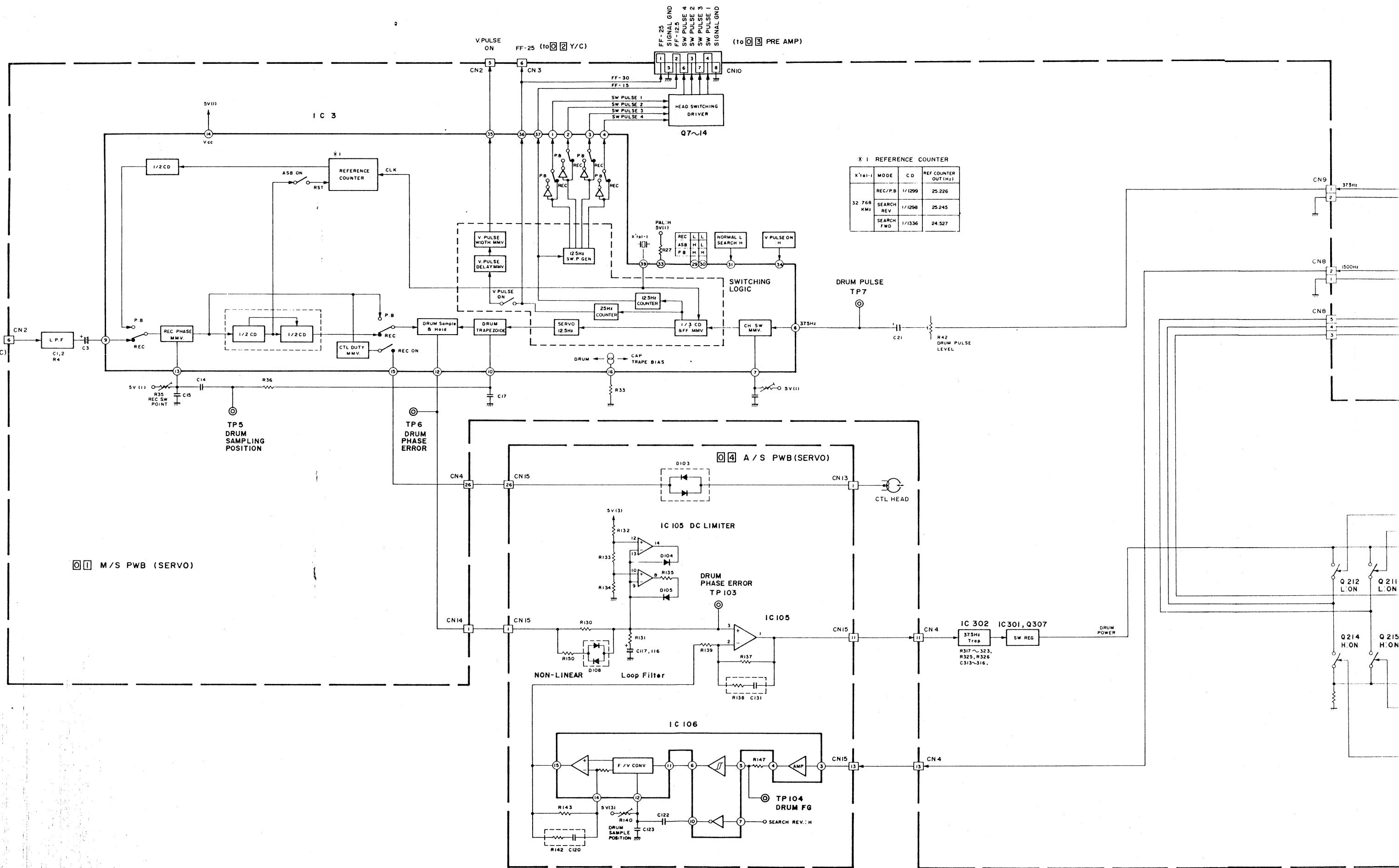


Kopftrommelservo Impulsdiagramm Drum servo timing chart



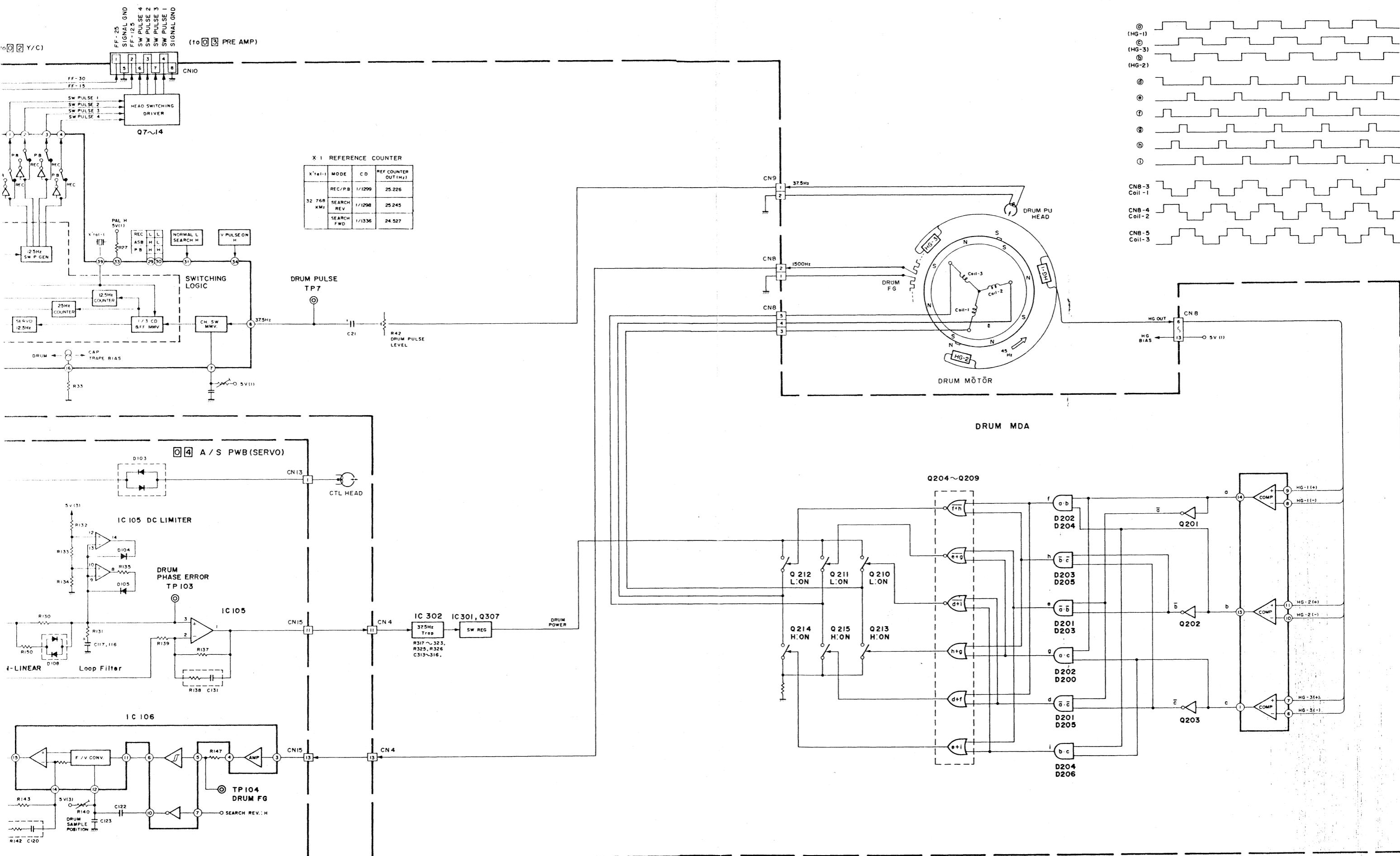
IC3 SWITCHING LOGIC BLOCK DIAGRAM

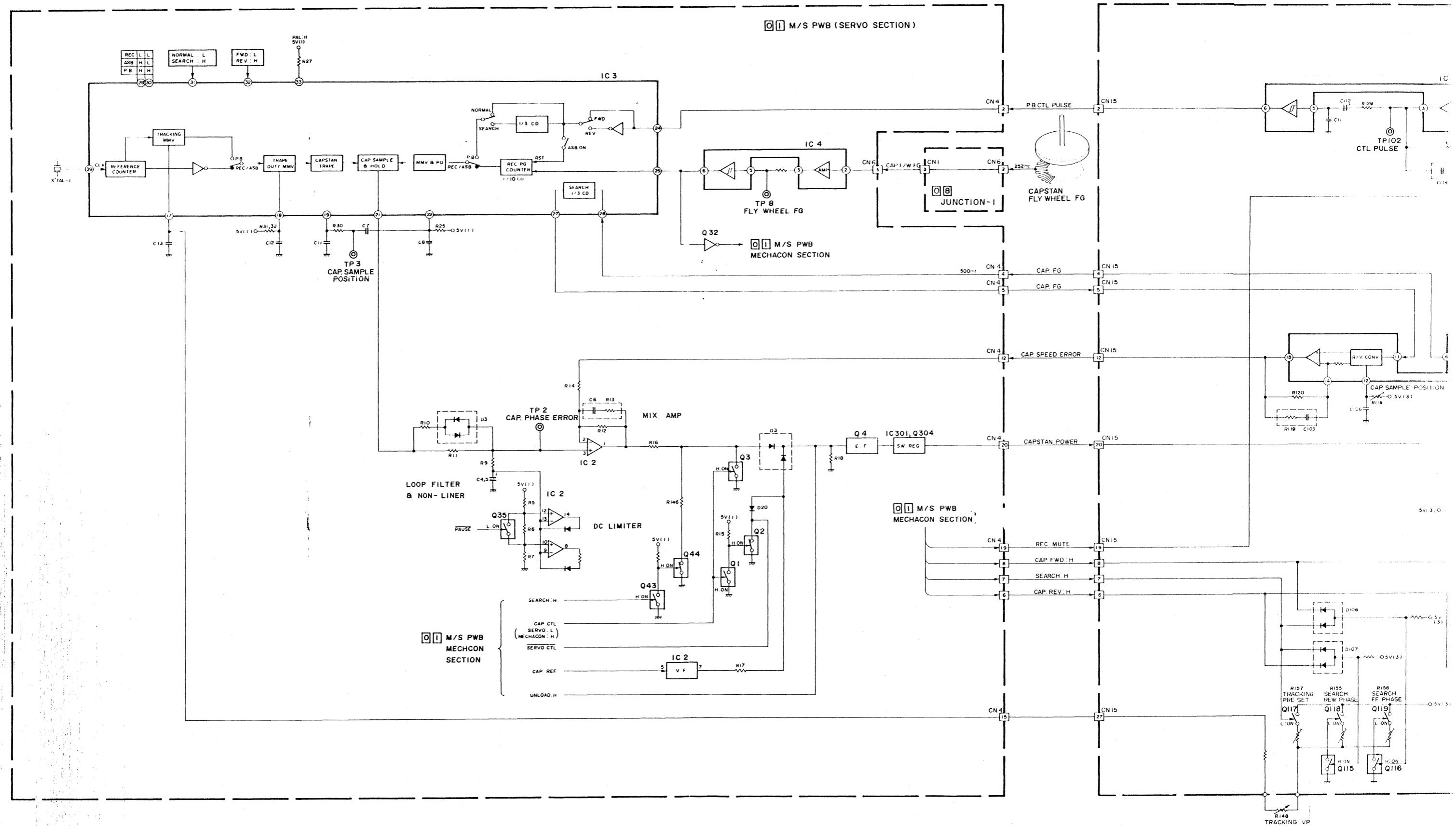




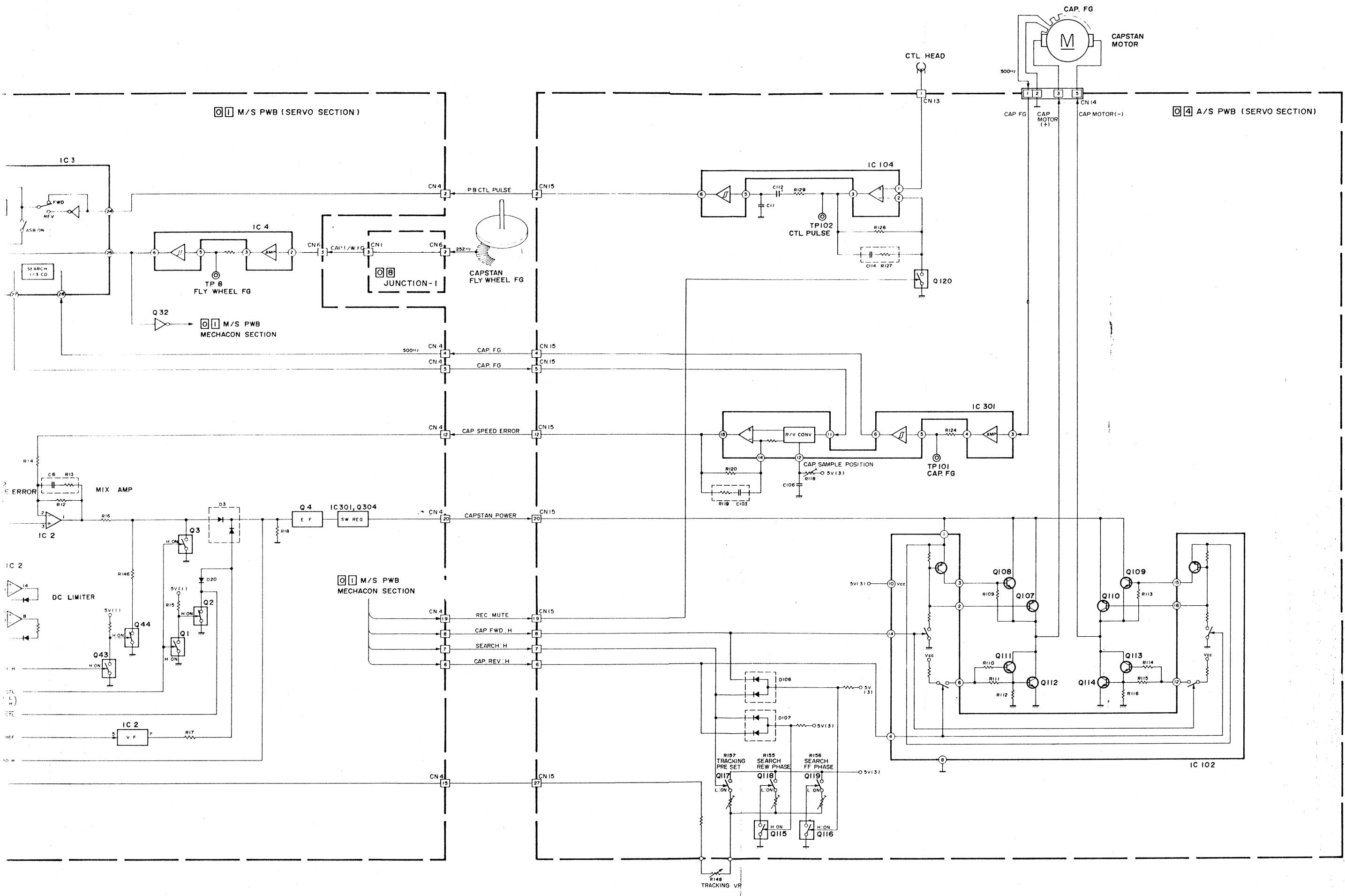
Kopftrommelservo Blockschaltbild
Drum servo block diagram

DRUM MDA TIMING CHART



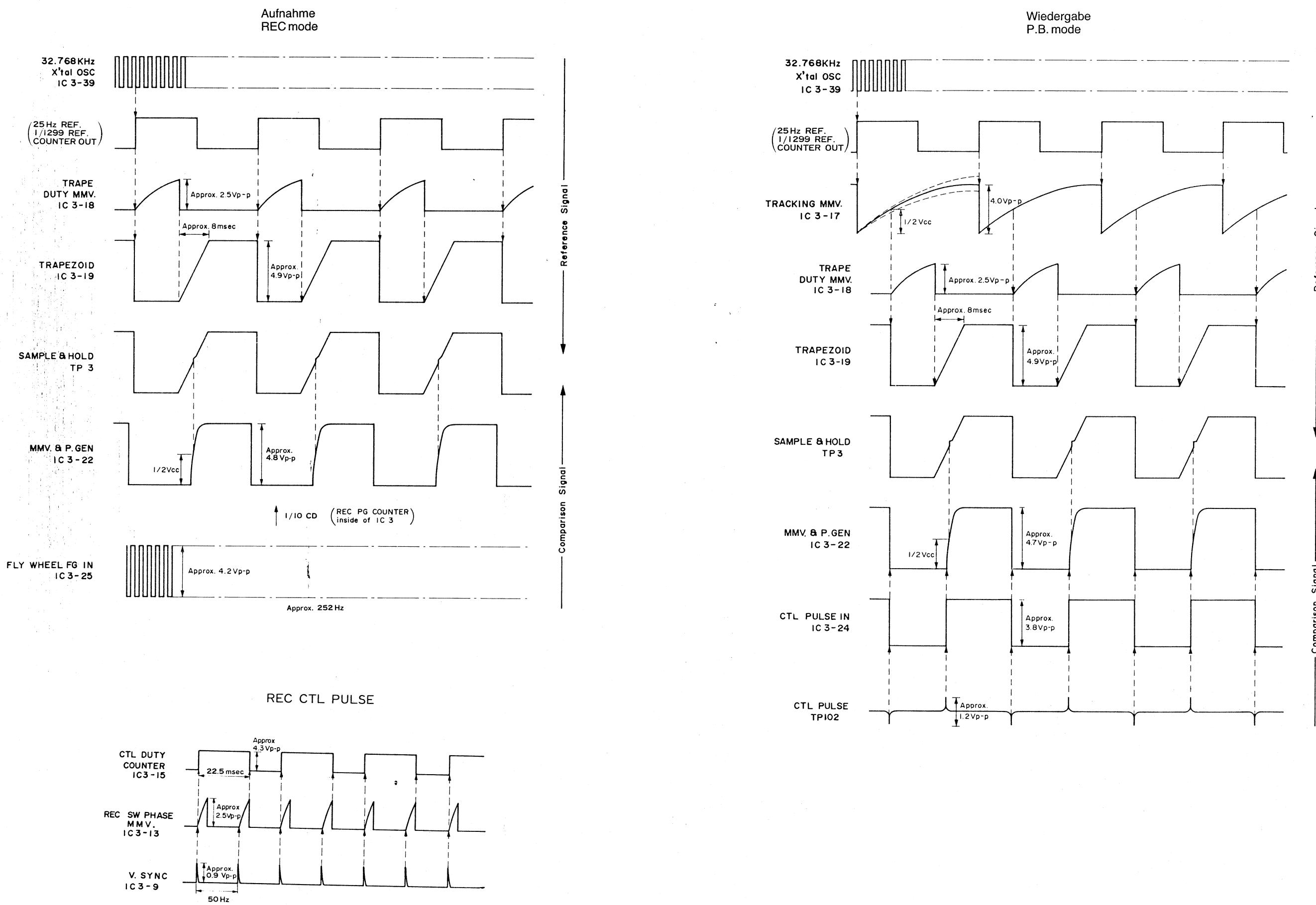


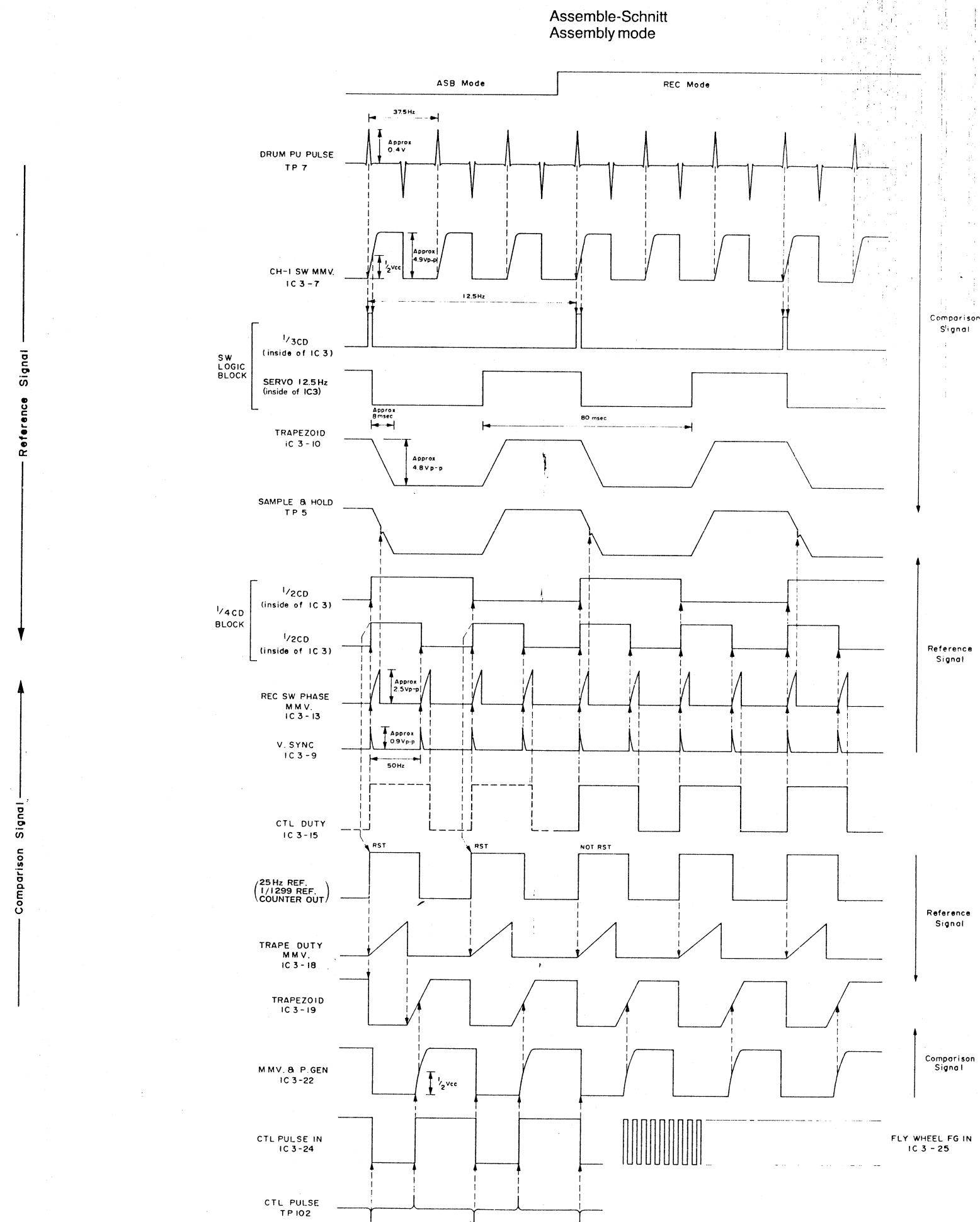
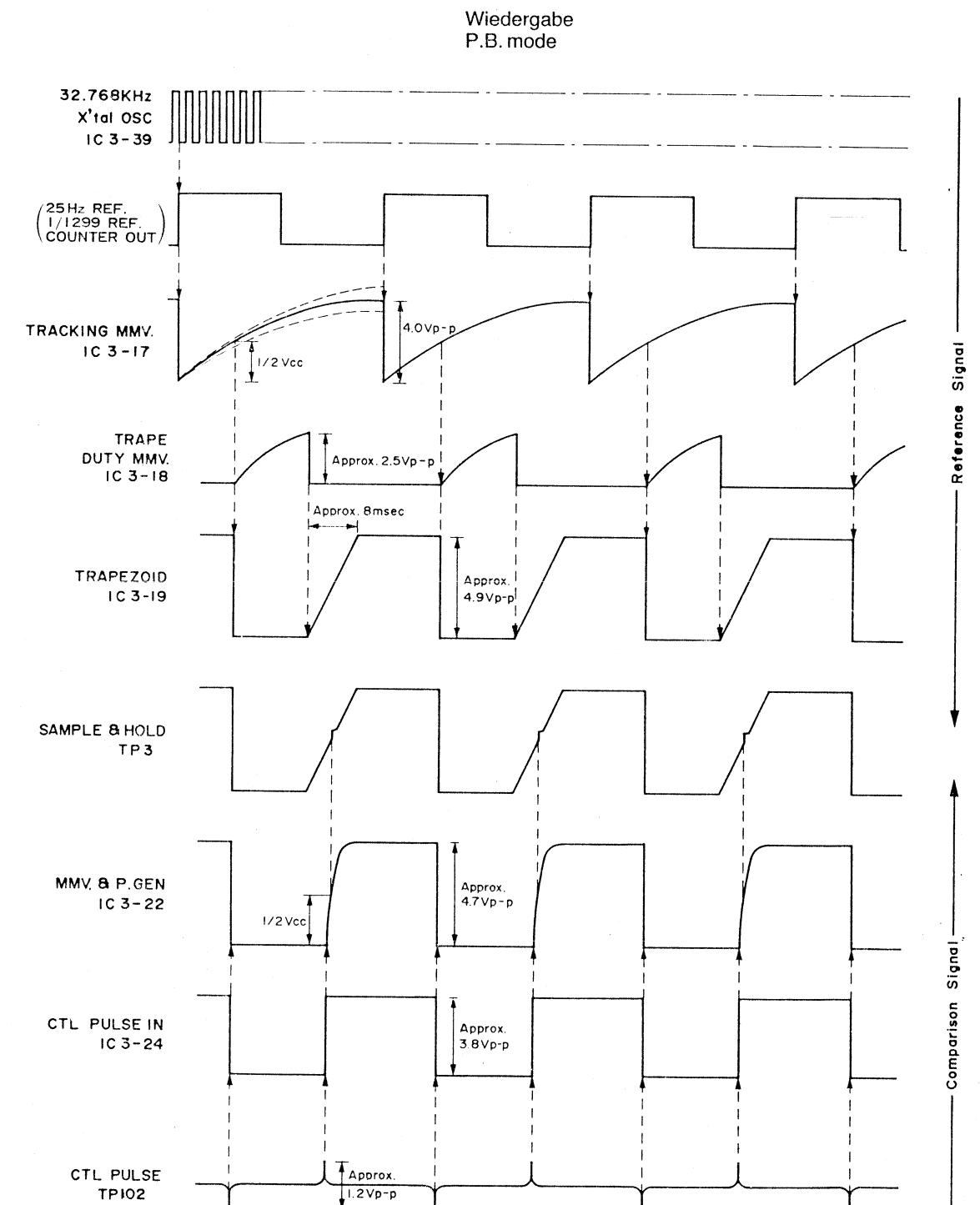
Capstanservo Blockschaltbild
Capstan servo block diagram

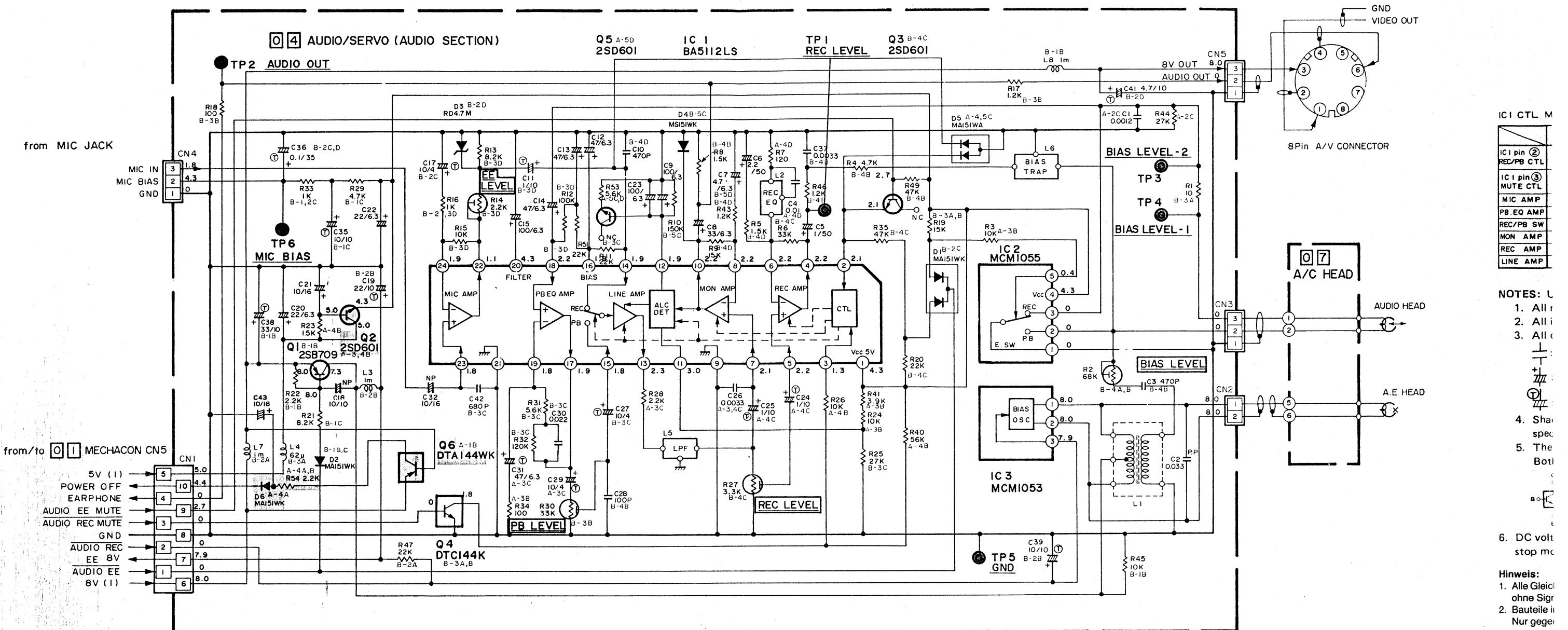


Capstanservo Impulsdiagramm

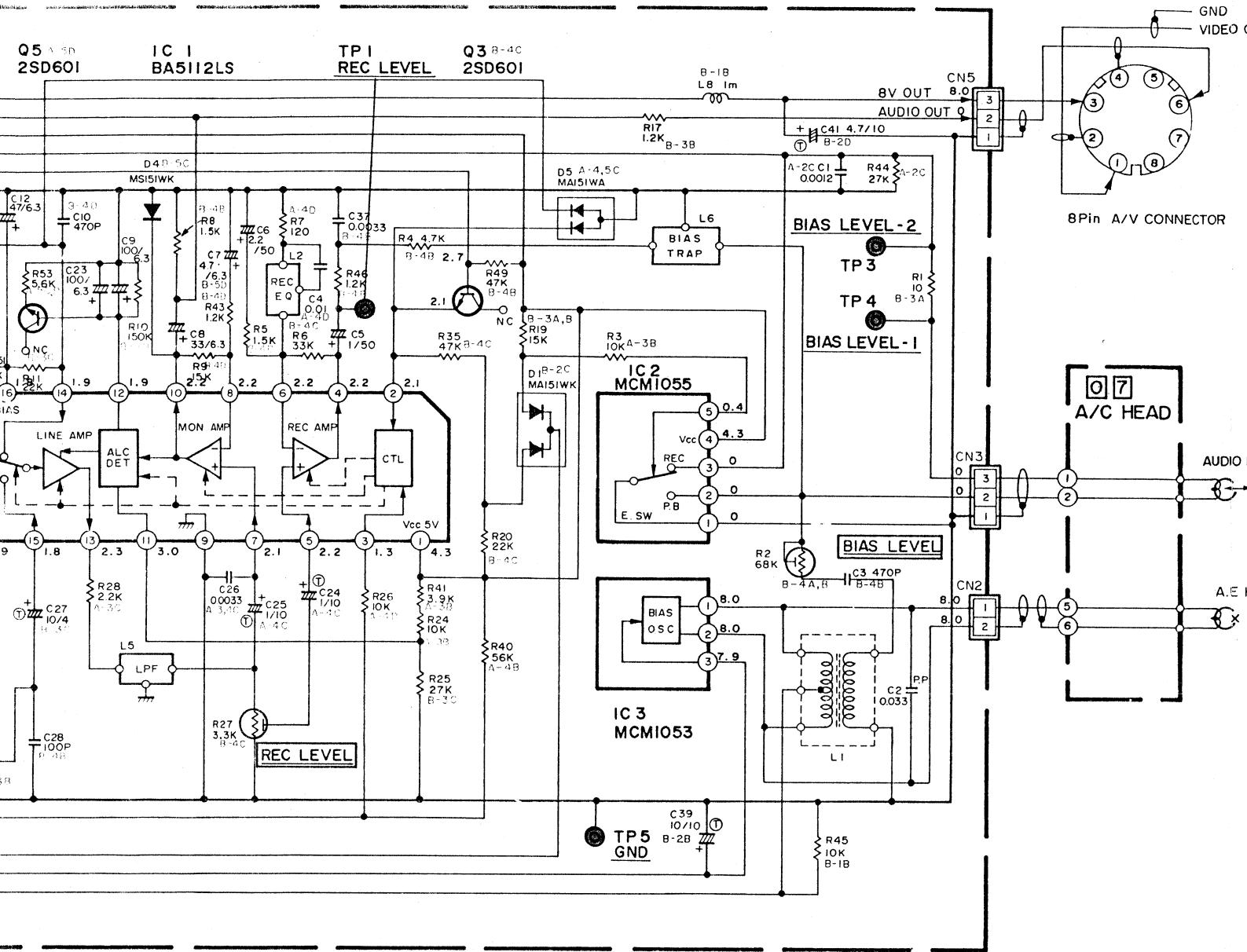
Capstan servo timing chart





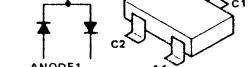
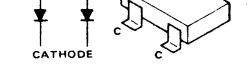
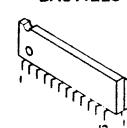
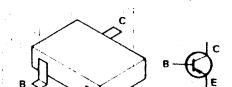
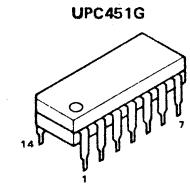
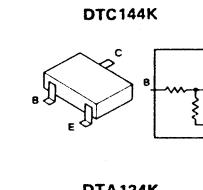
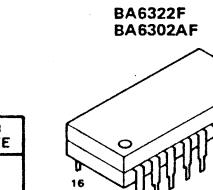


Audio-Schaltbild
Audio circuit diagram



IC1 CTL MODE

	REC	EE/REC MUTE	PB	PB MUTE
IC1 pin ② REC/PB CTL	L	L	H	H
IC1 pin ③ MUTE CTL	L	H	L	H
MIC AMP	ON	ON	ON	ON
PB.EQ AMP	ON	ON	ON	ON
REC/PB SW	REC	REC	PB	PB
MON AMP	ON	ON	ON	OFF
REC AMP	ON	OFF	OFF	OFF
LINE AMP	ON	ON	OFF	OFF



NOTES: Unless otherwise specified.

1. All resistance values are in ohms.
2. All inductance values are in H.
3. All capacitance values are in μ F.
4. Shaded () parts are critical for safety. Replace only with specified part numbers.
5. The digital transistor is a transistor that includes built in resistors. Both PNP and NPN transistors are available.

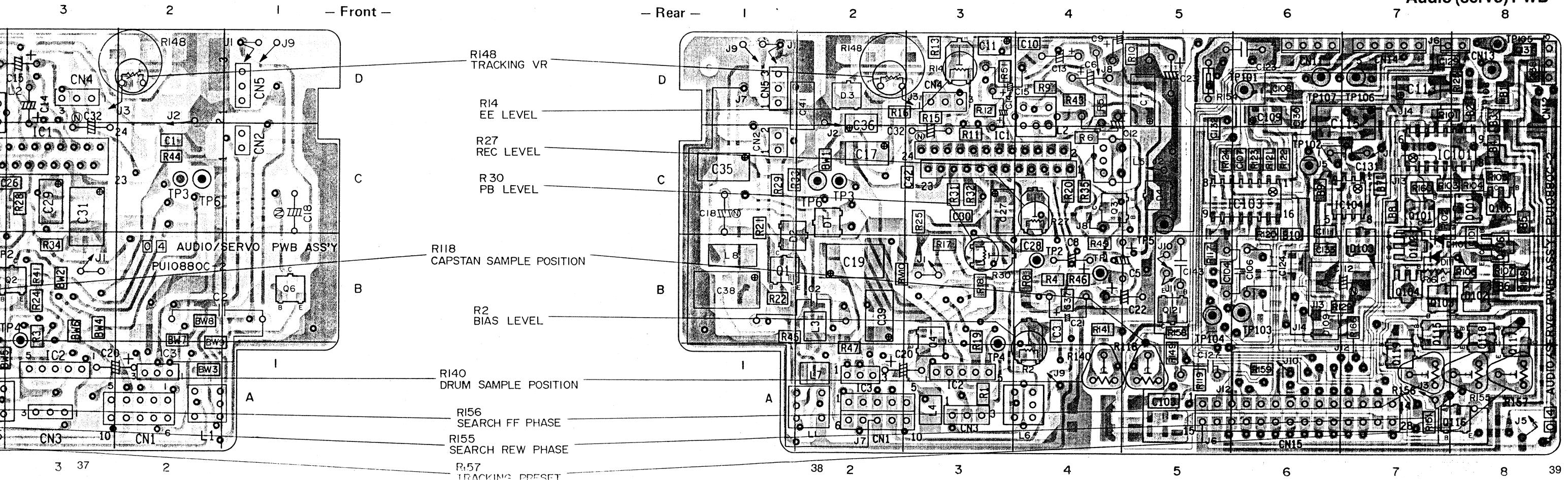
MY1 : Mylar capacitor
NP1 : Non-polar capacitor
P, PL : Polypropylene capacitor
T : Tantalum capacitor

6. DC voltages are measured with a digital voltmeter during stop mode without a signal.

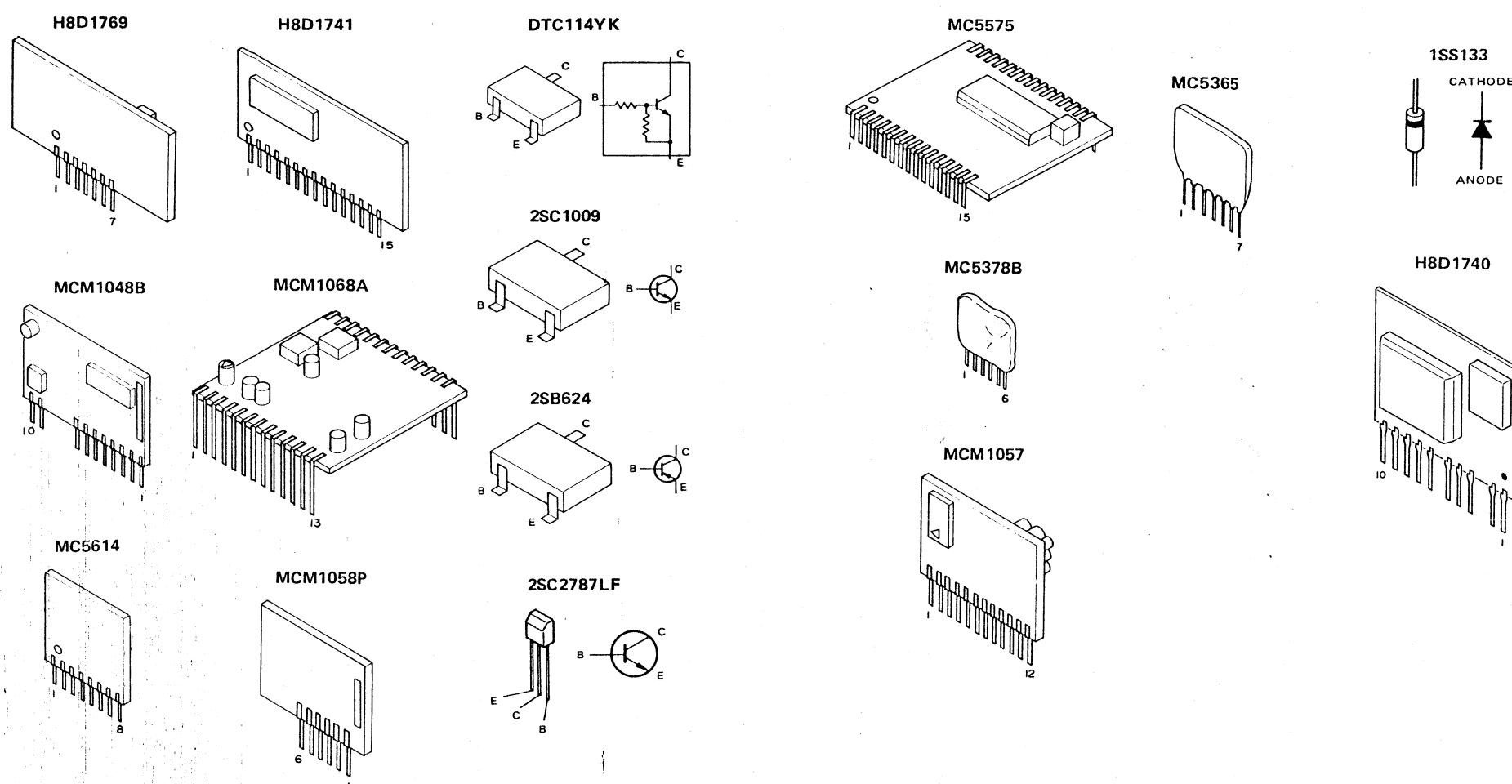
Hinweis:

1. Alle Gleichspannungen sind mit einem Digital-Voltmeter im Stop-Betrieb ohne Signal gemessen.
2. Bauteile in den schattierten Flächen sind Sicherheits-Bauteile! Nur gegen Original-Ersatzteile austauschen!

0 4 Audio (Servo)-Platte
Audio (servo) PWB



0 2 Video-Platte (Recorder) Video PWB (tape recorder)



- RECORDING SIGNAL PATH
- PLAYBACK SIGNAL PATH
- REC PLAY SIGNAL PATH

NOTES: Unless otherwise specified.

1. All resistance values are in ohms.
2. All inductance values are in H.
3. All capacitance values are in μ F.

 : Chip capacitor  : Electrolytic capacitor

 : Non-polar capacitor  : Tantalum capacitor

 : Polypropylene capacitor  : Mylar capacitor

4. Shaded (.....) parts are critical for safety. Replace only with specified part numbers.

5. The digital transistor that includes built in resistors.
Both PNP and NPN transistors are available.

6. DC voltages are measured with a digital voltmeter during recording mode.

7. Where voltage differs between recording and play-back, the voltage during play-back is shown in parentheses.

8. Wave forms

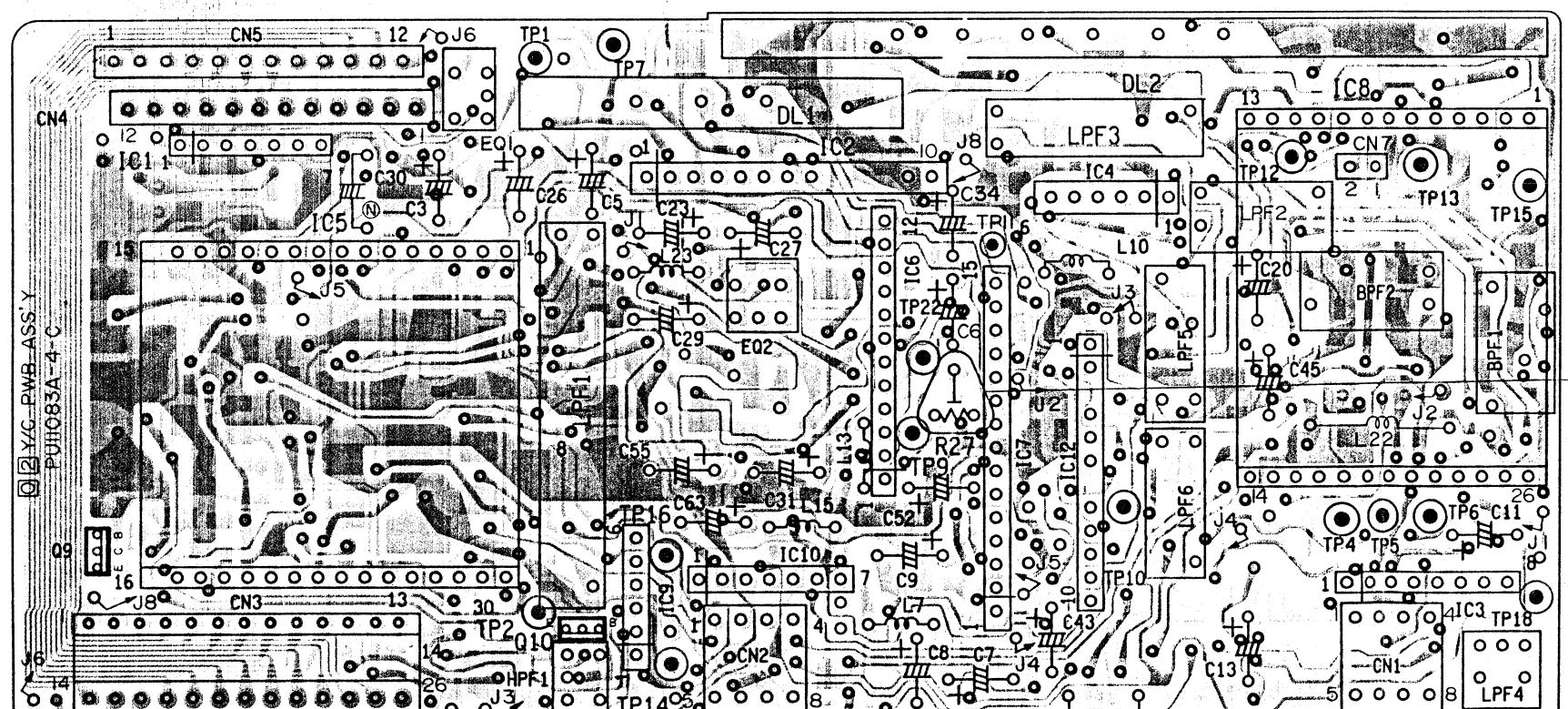
Recording: Measured by using "Y/C SEPARATOR" with color bar signal input.

Play-back: Measured during play-back of color bar segment of Alignment Tape.

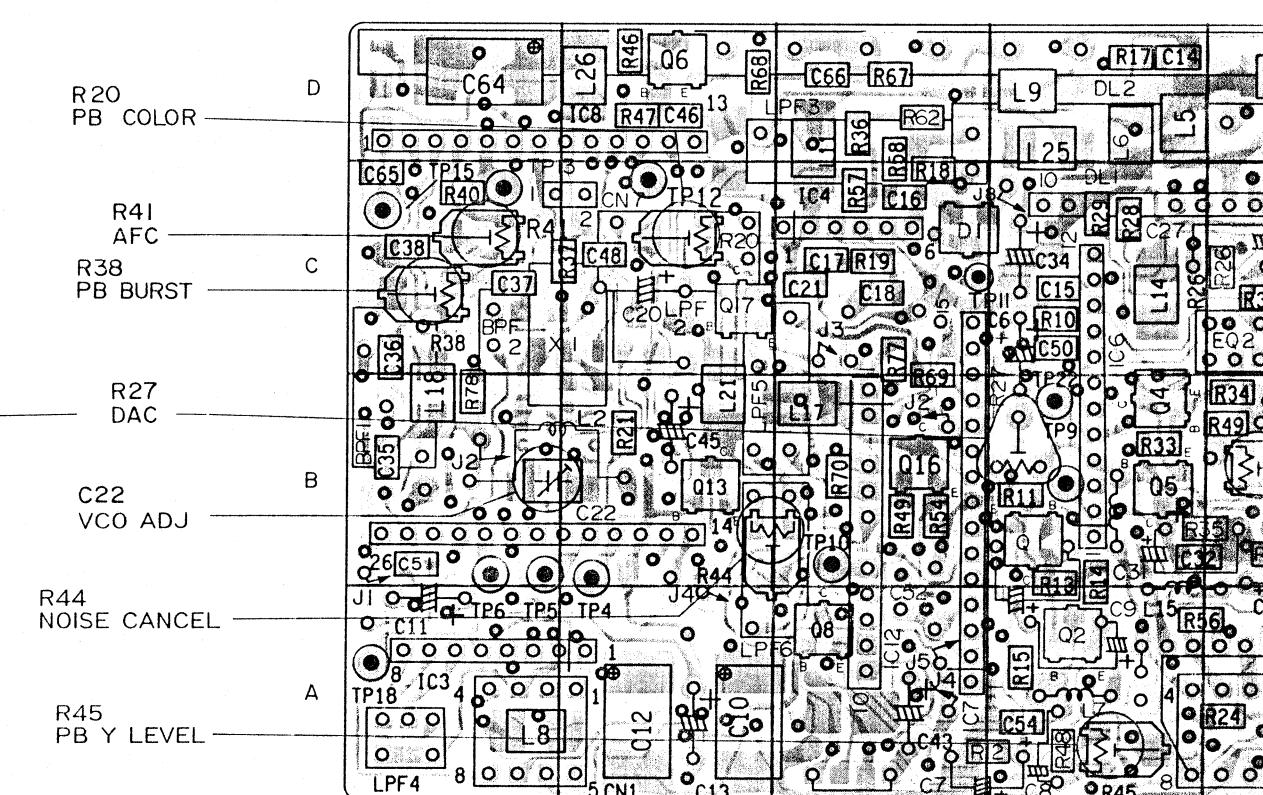
Hinweis:

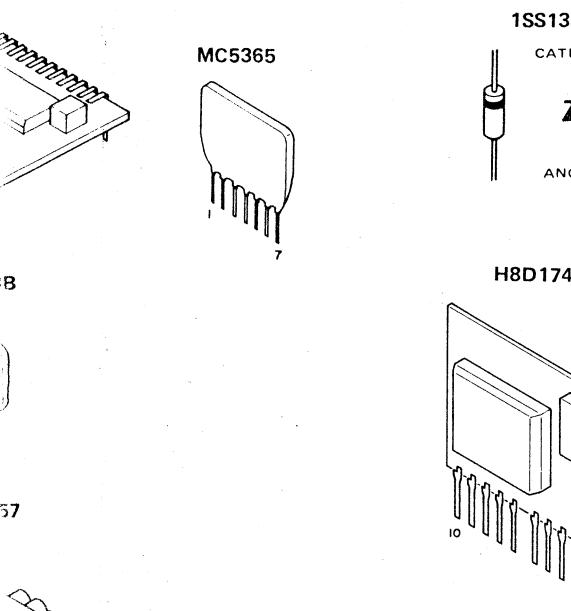
1. Alle Gleichspannungen sind mit einem Digital-Voltmeter im Aufnahmebetrieb gemessen.
2. Ergeben sich im Wiedergabe-Betrieb andere Spannungen, so sind diese in Klammern angegeben.
3. Bauteile in den schattierten Flächen sind Sicherheitsbauteile! Nur gegen Original-Ersatzteile wechseln!

– Front –



— Rear —



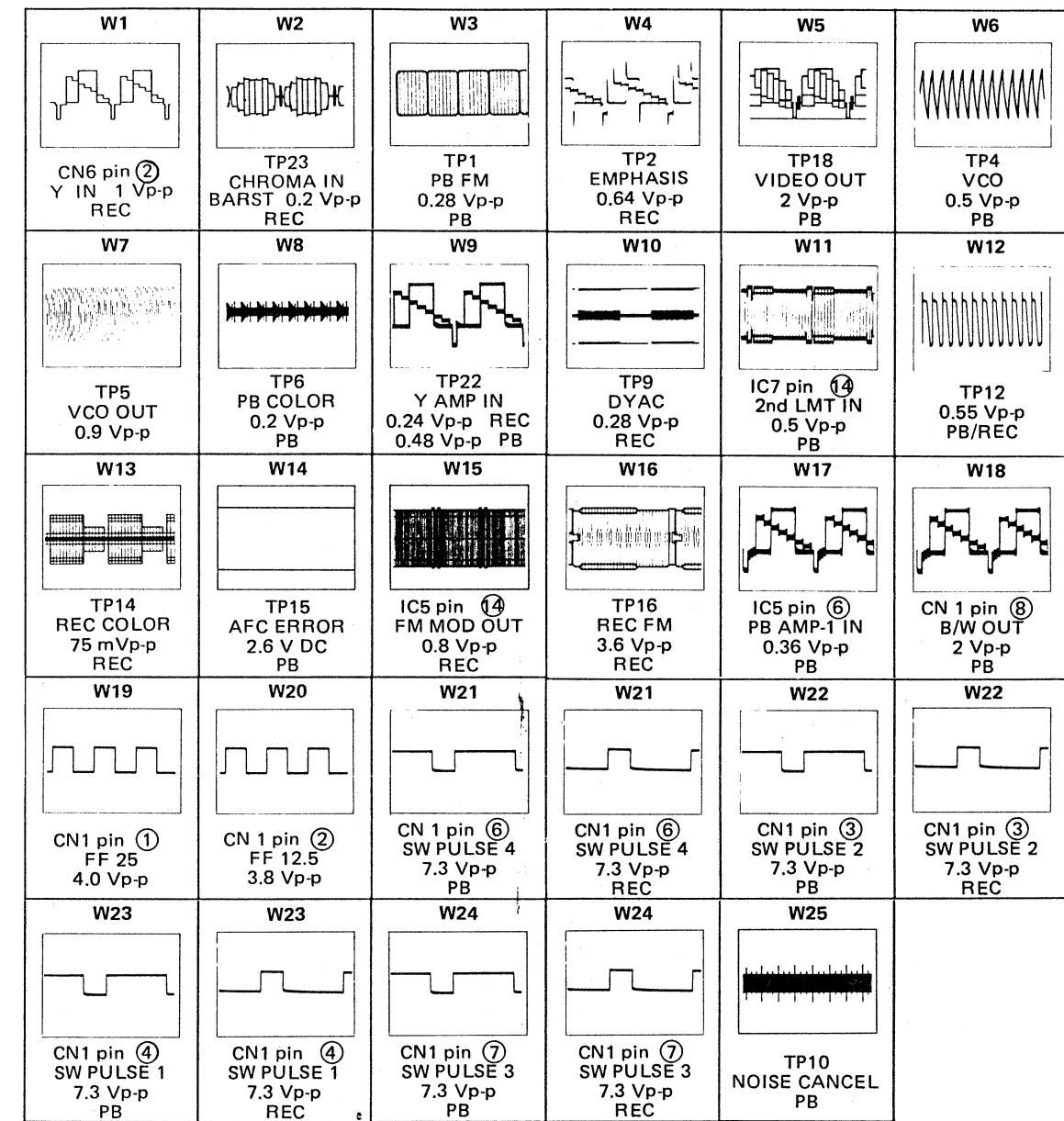


► RECORDING SIGNAL PATH
► PLAYBACK SIGNAL PATH
► REC PLAY SIGNAL PATH

NOTES: Unless otherwise specified.
 1. All resistance values are in ohms.
 2. All inductance values are in H.
 3. All capacitance values are in μ F.
 4. Shaded (■) parts are critical for safety. Replace only with specified part numbers.
 5. The digital transistor that includes built in resistors. Both PNP and NPN transistors are available.
 6. DC voltages are measured with a digital voltmeter during recording mode.
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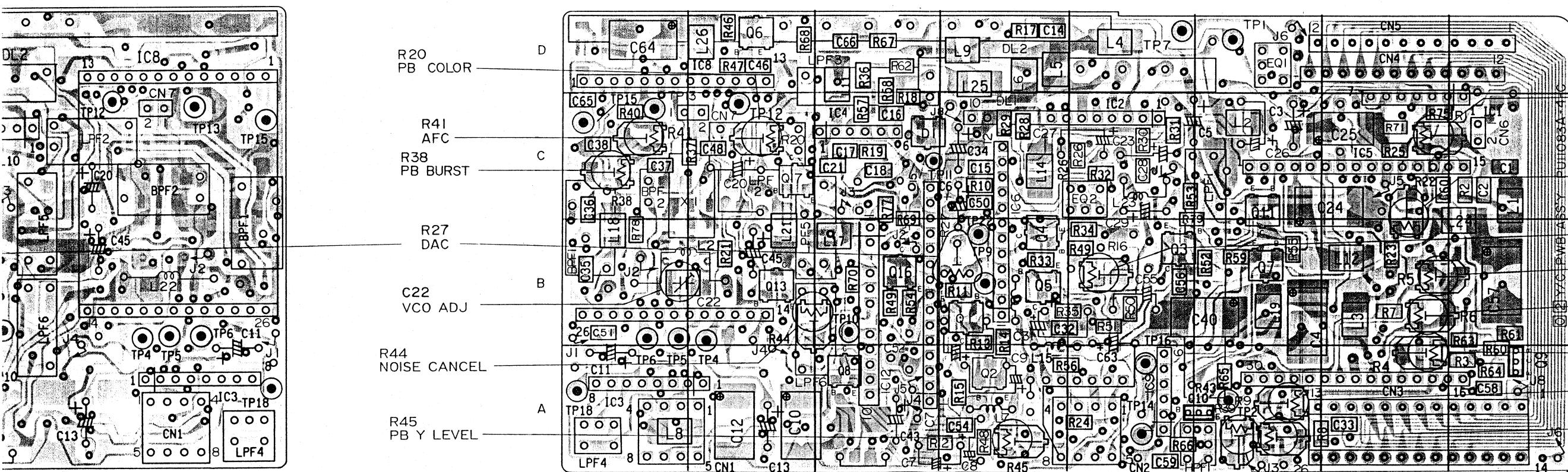
Hinweis:

- Alle Gleichspannungen sind mit einem Digital-Voltmeter im Aufnahmebetrieb gemessen.
- Ergeben sich im Wiedergabe-Betrieb andere Spannungen, so sind diese in Klammern angegeben.
- Bauteile in den schattierten Flächen sind Sicherheitsbauteile! Nur gegen Original-Ersatzteile wechseln!

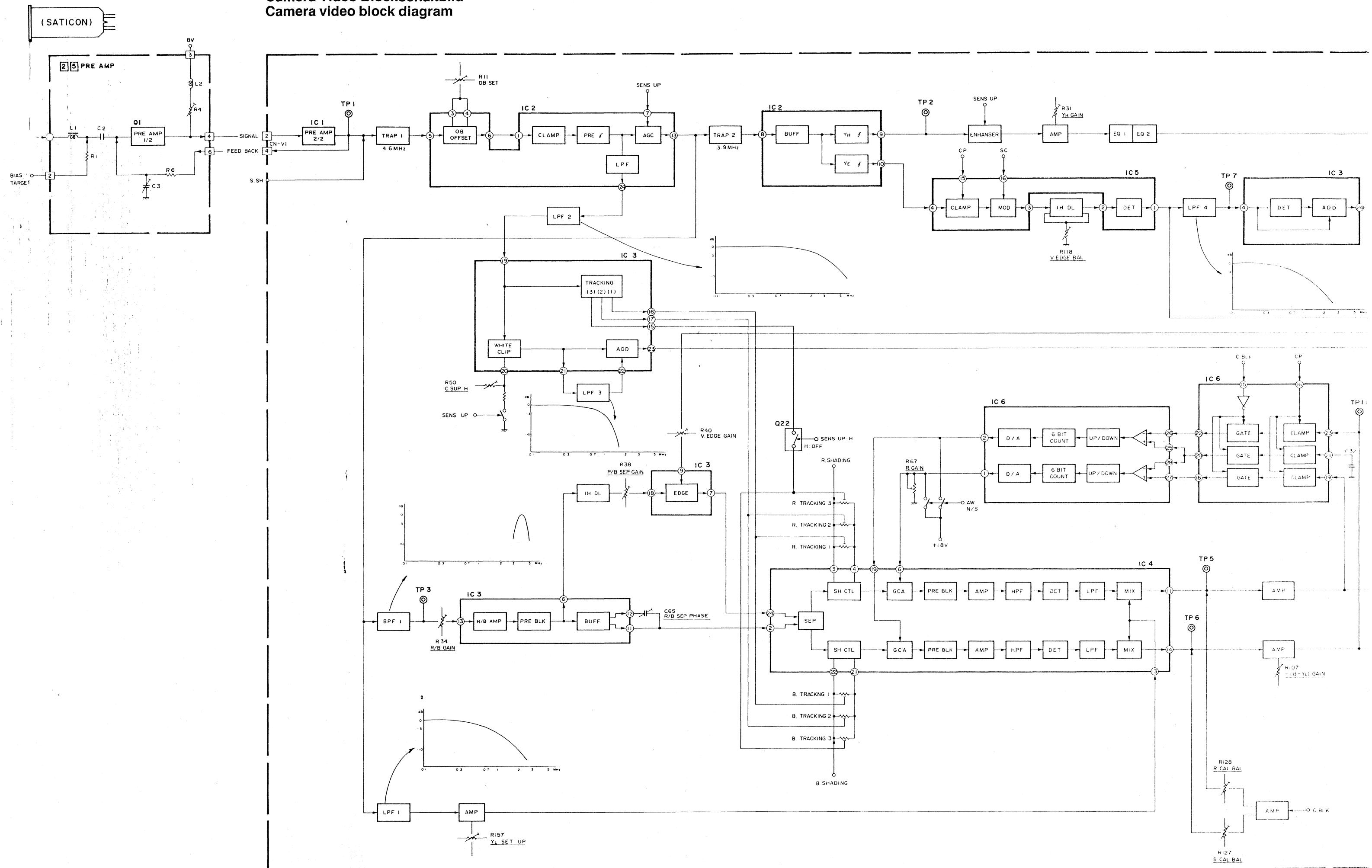


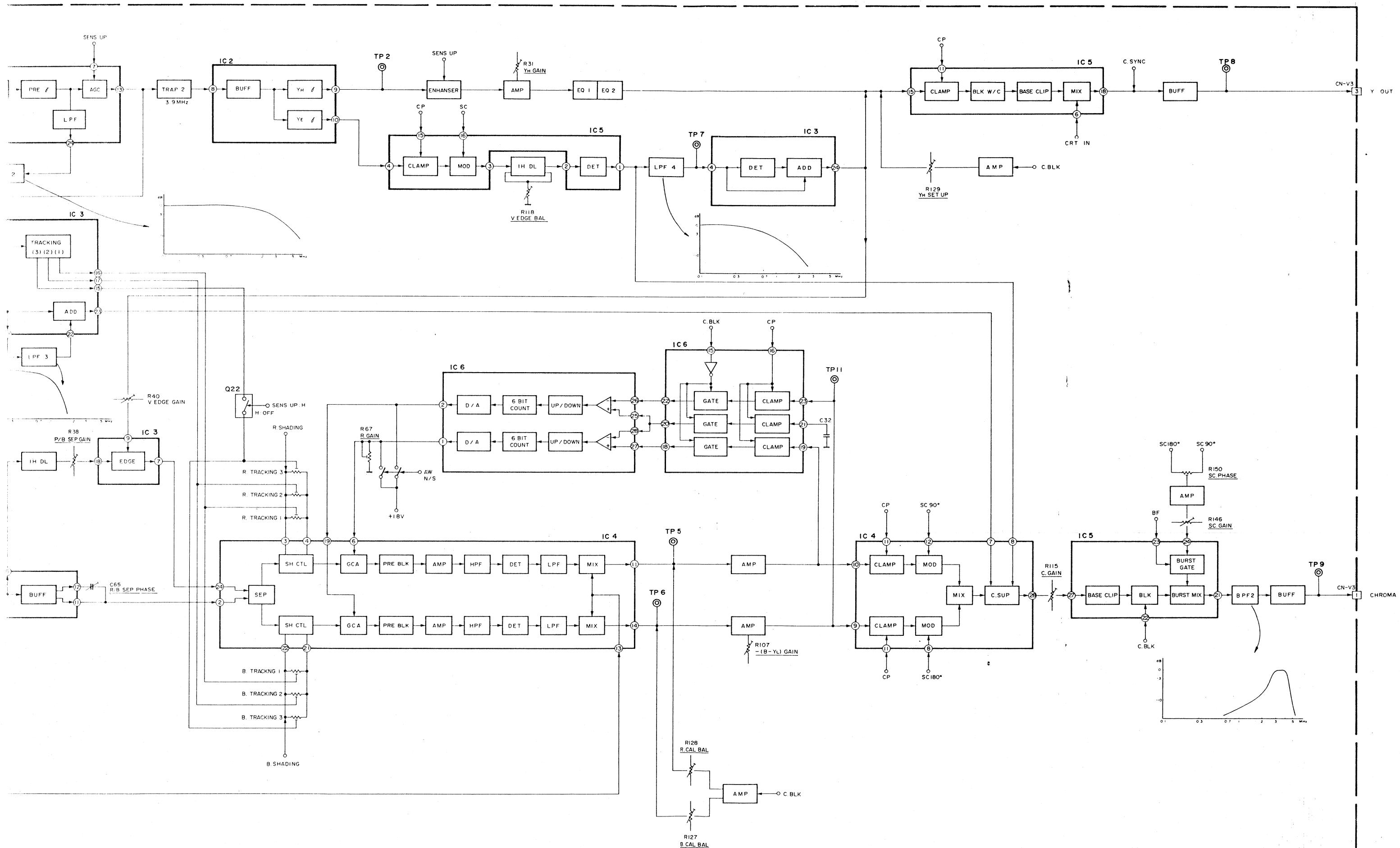
— Front —

— Rear —

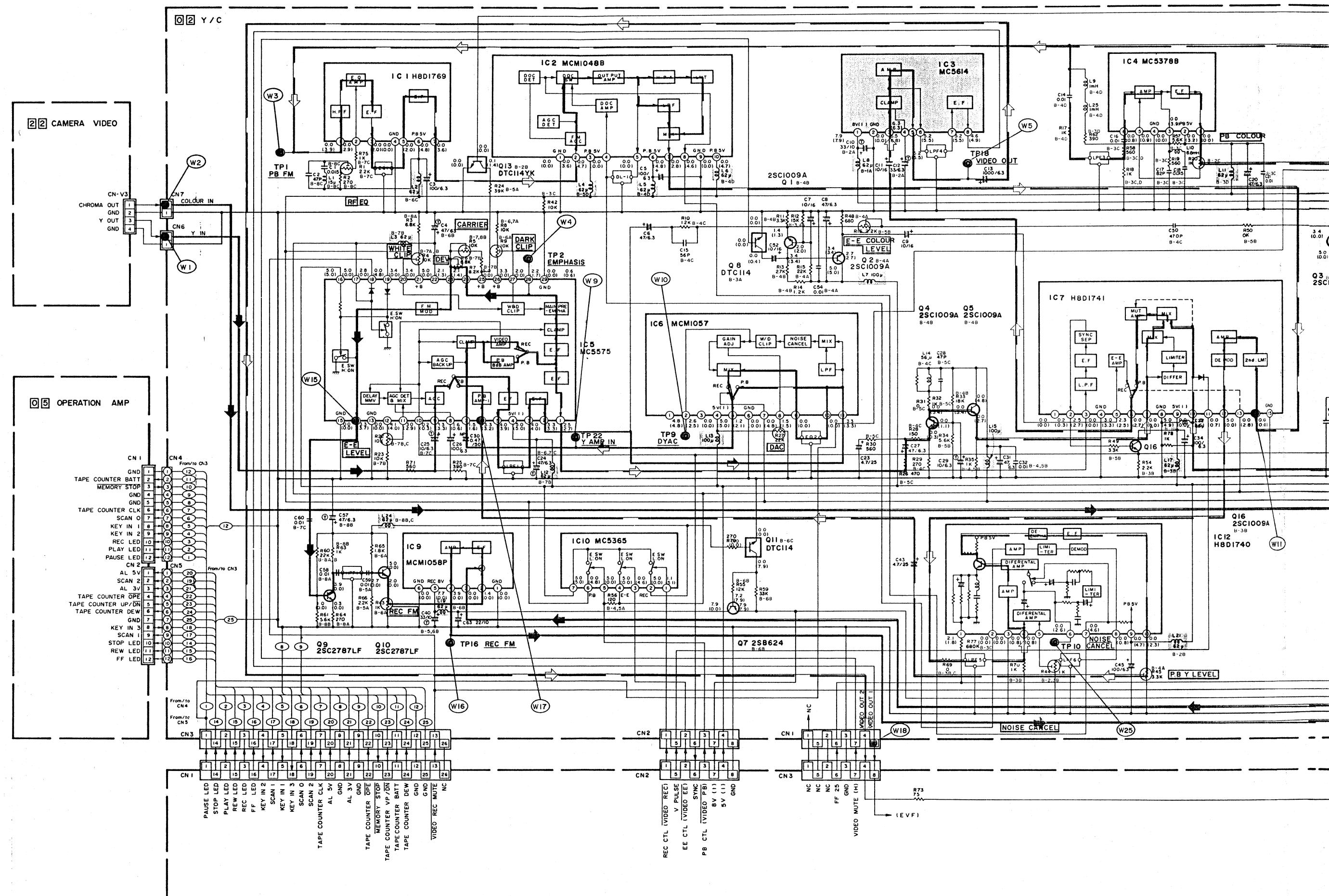


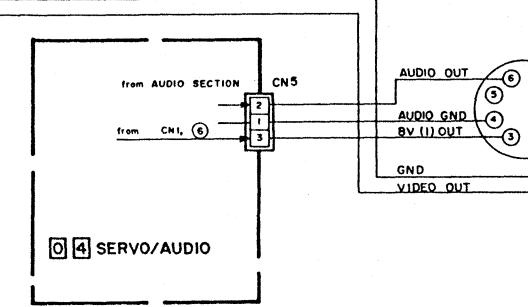
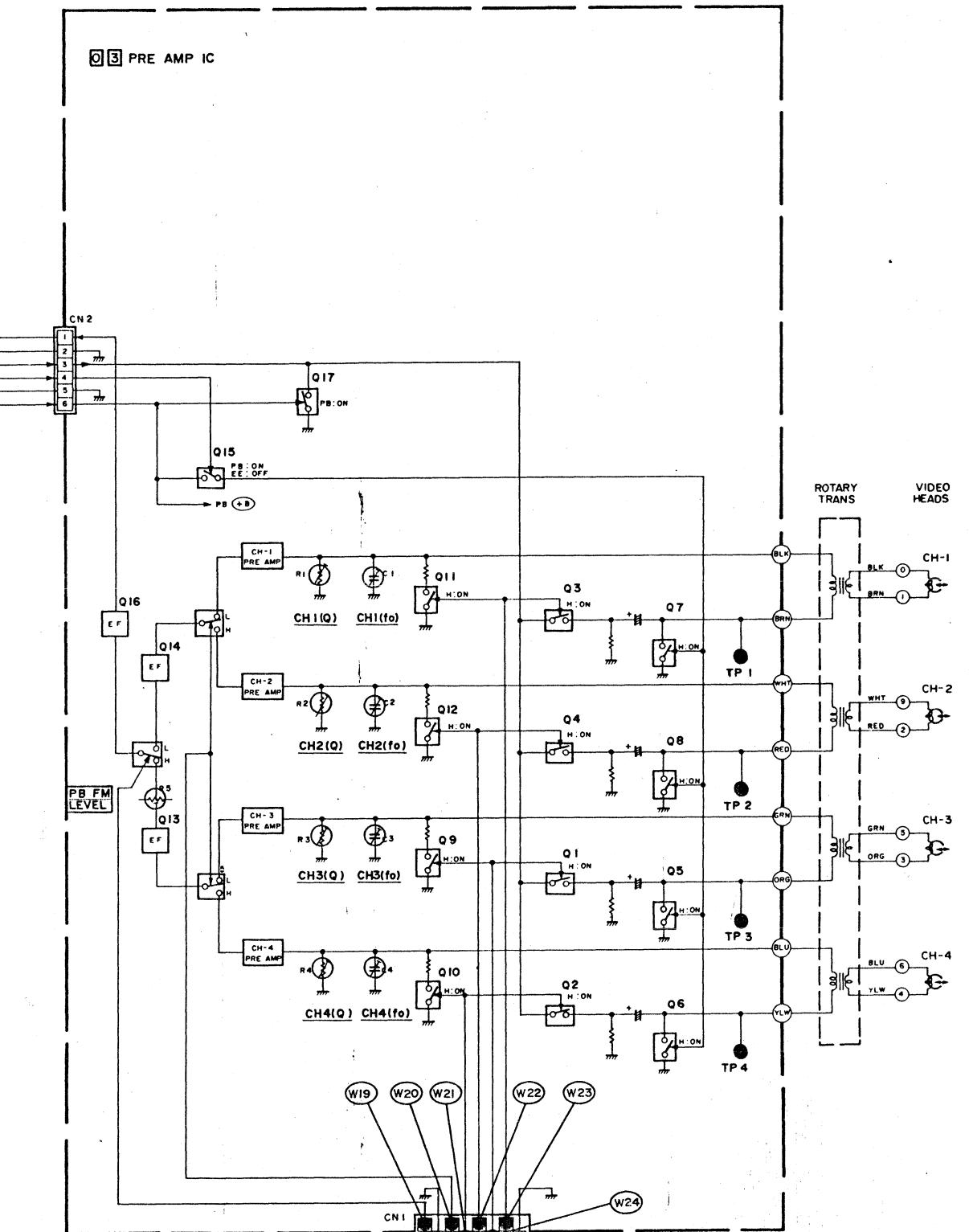
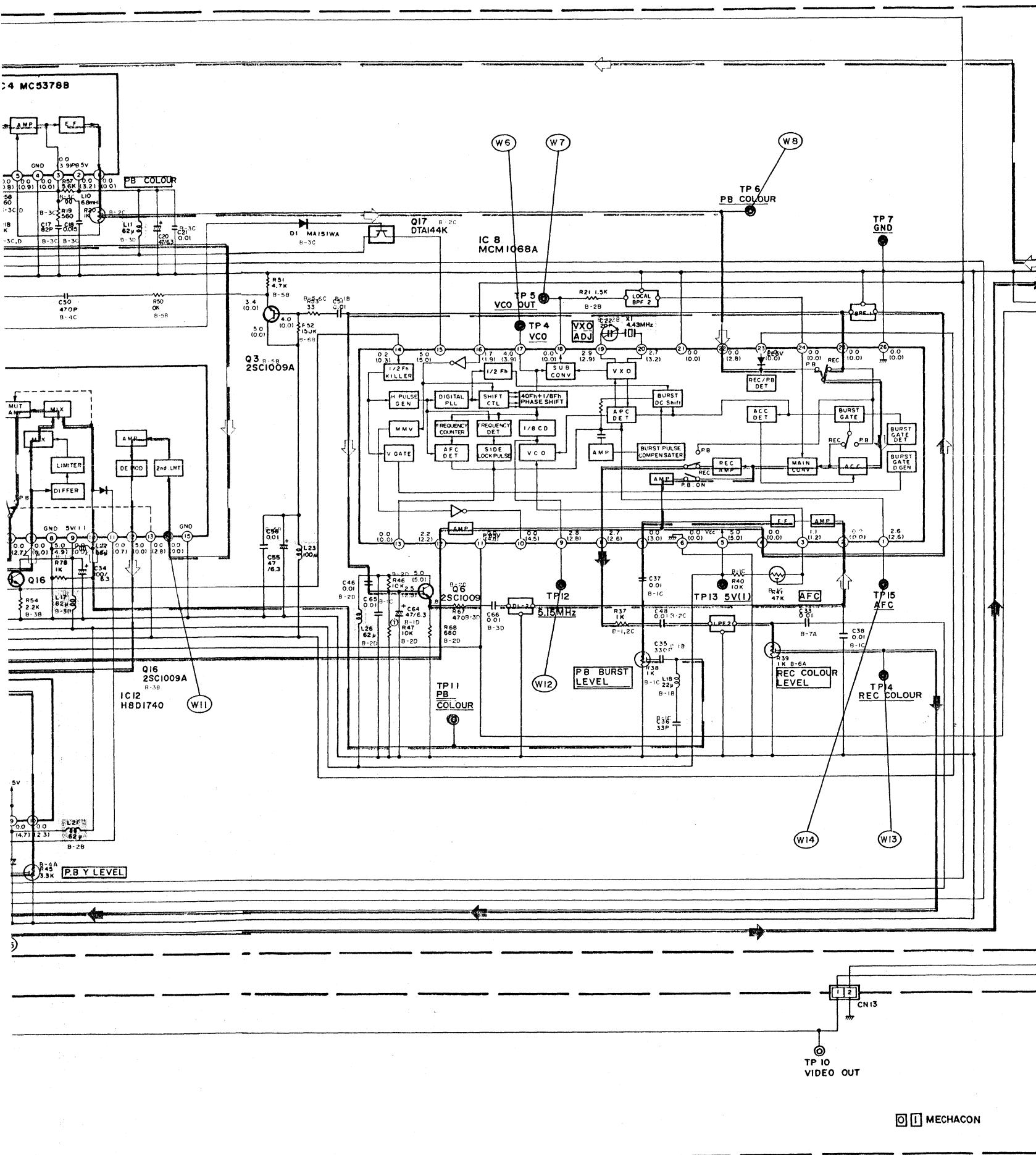
Camera Video Blockschaltbild
Camera video block diagram



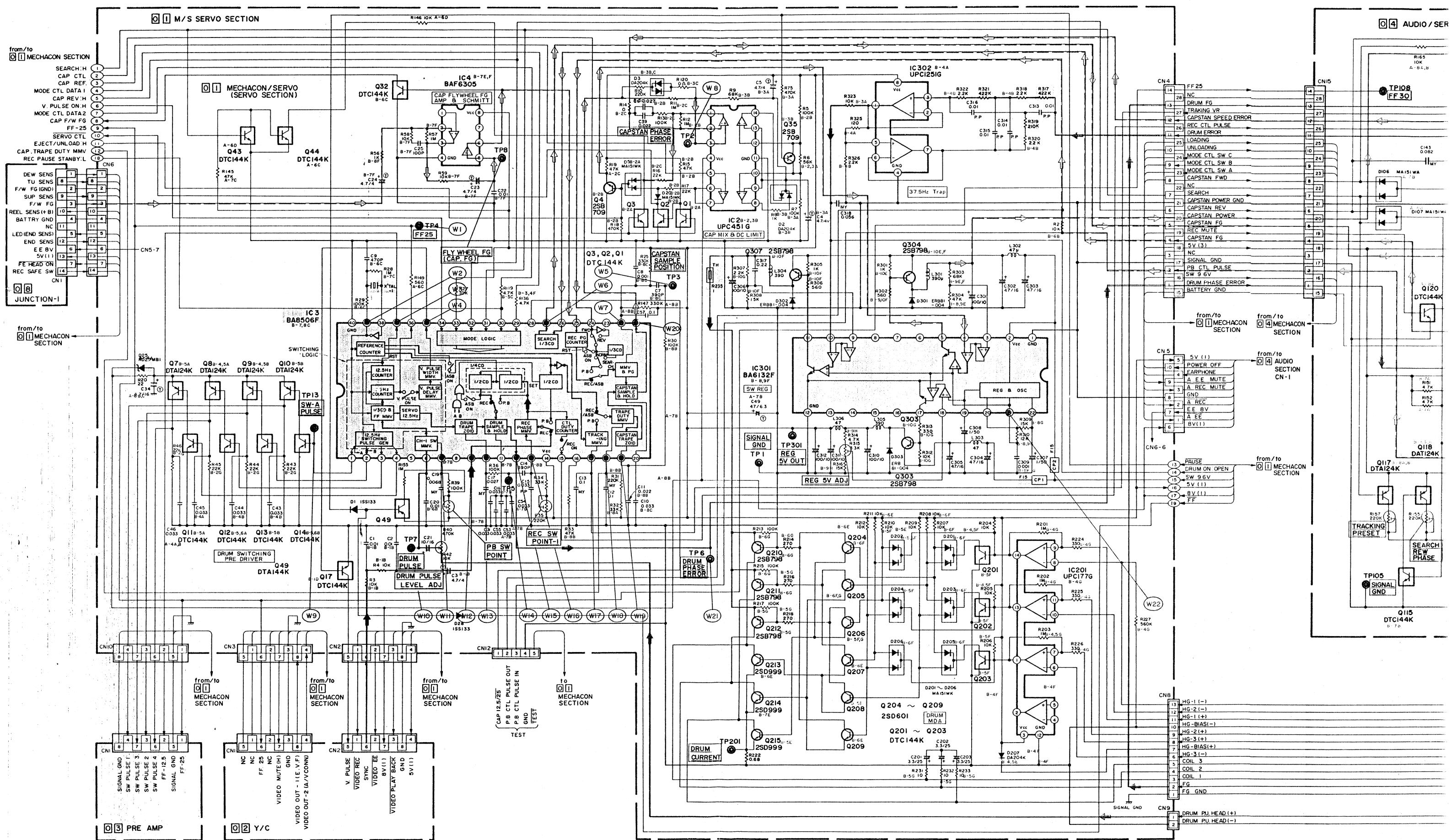


Video-Schaltbild (Recorder)
Video circuit diagram (tape recorder)

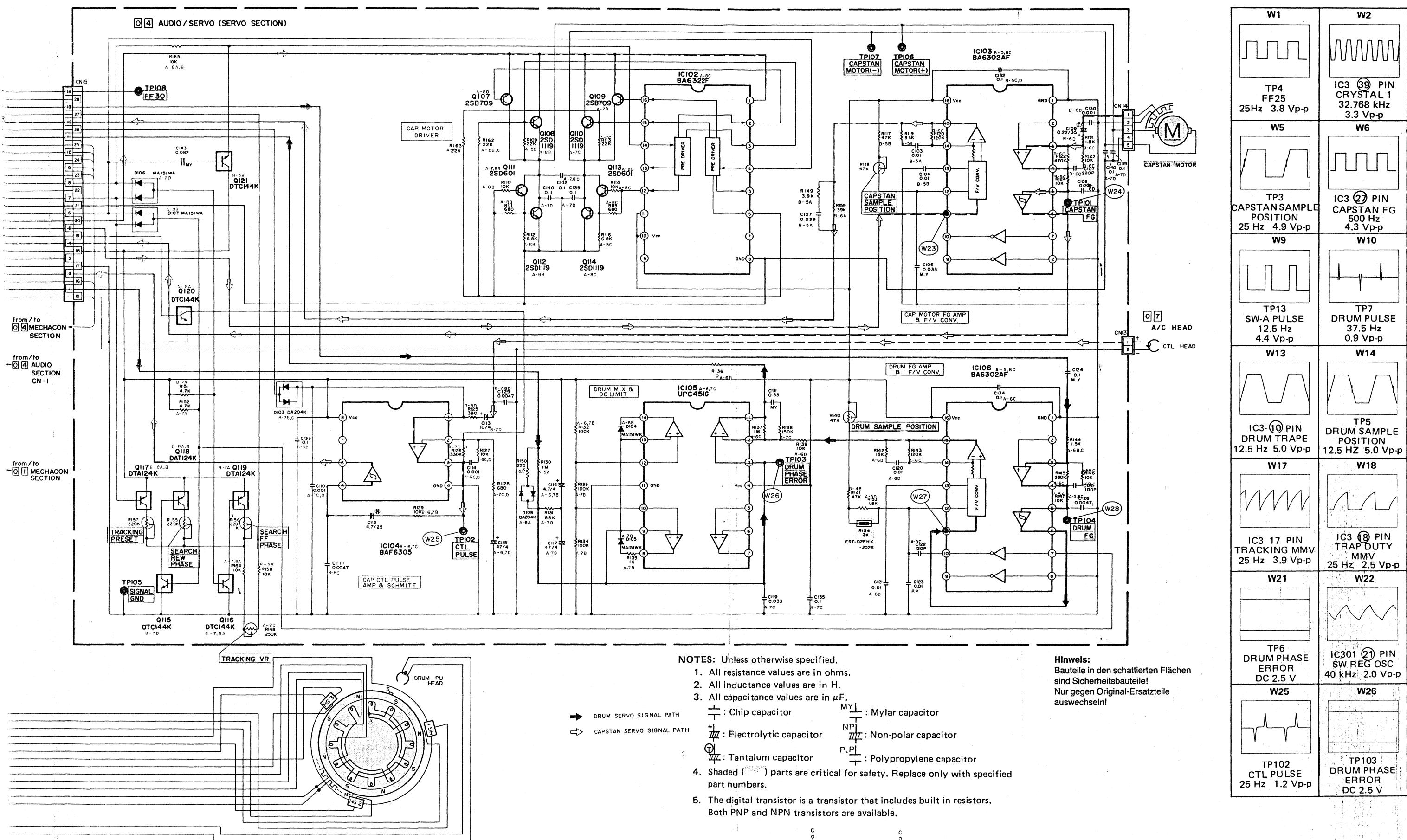




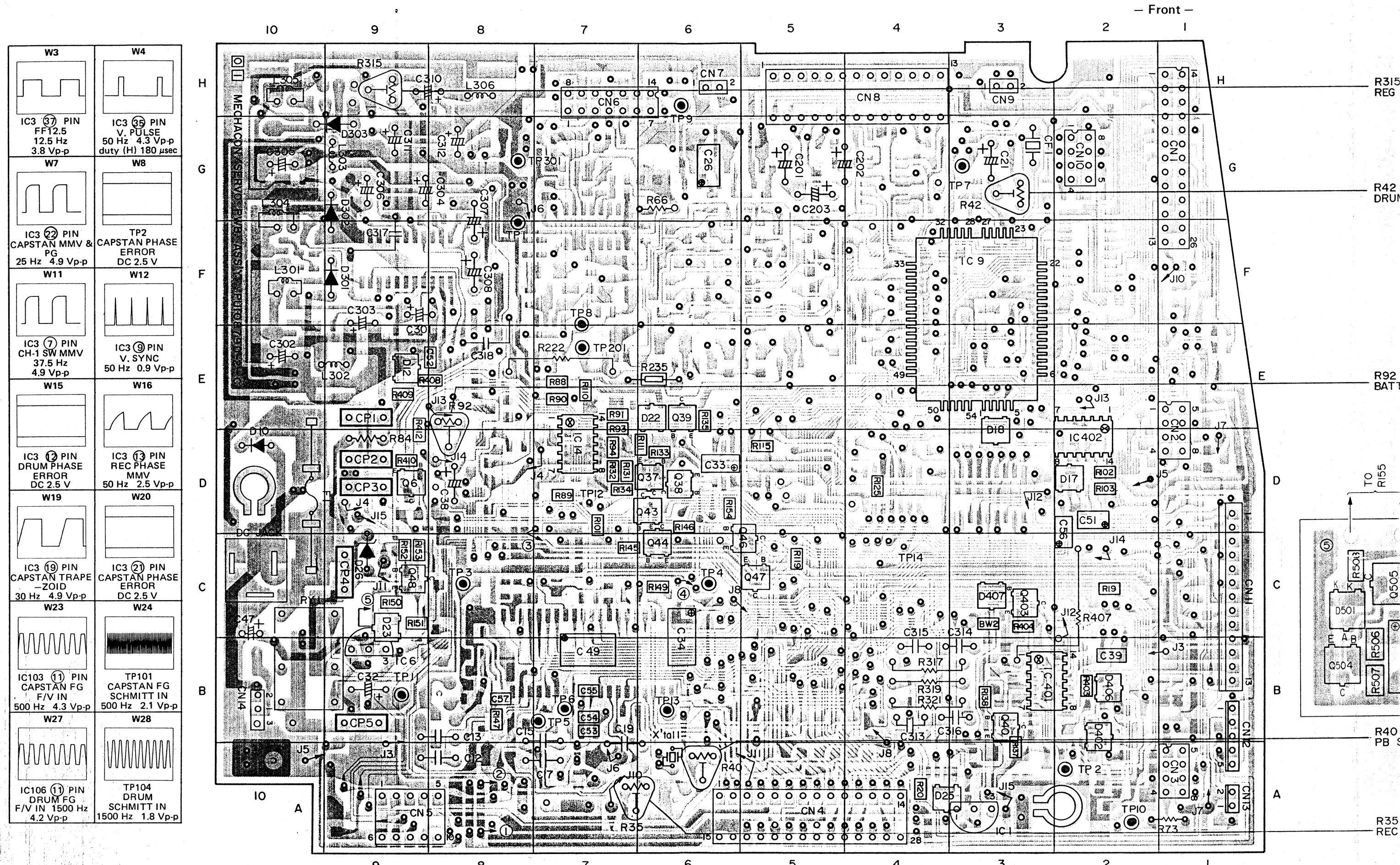
Servo-Regelung Schaltbild Servo circuit diagram



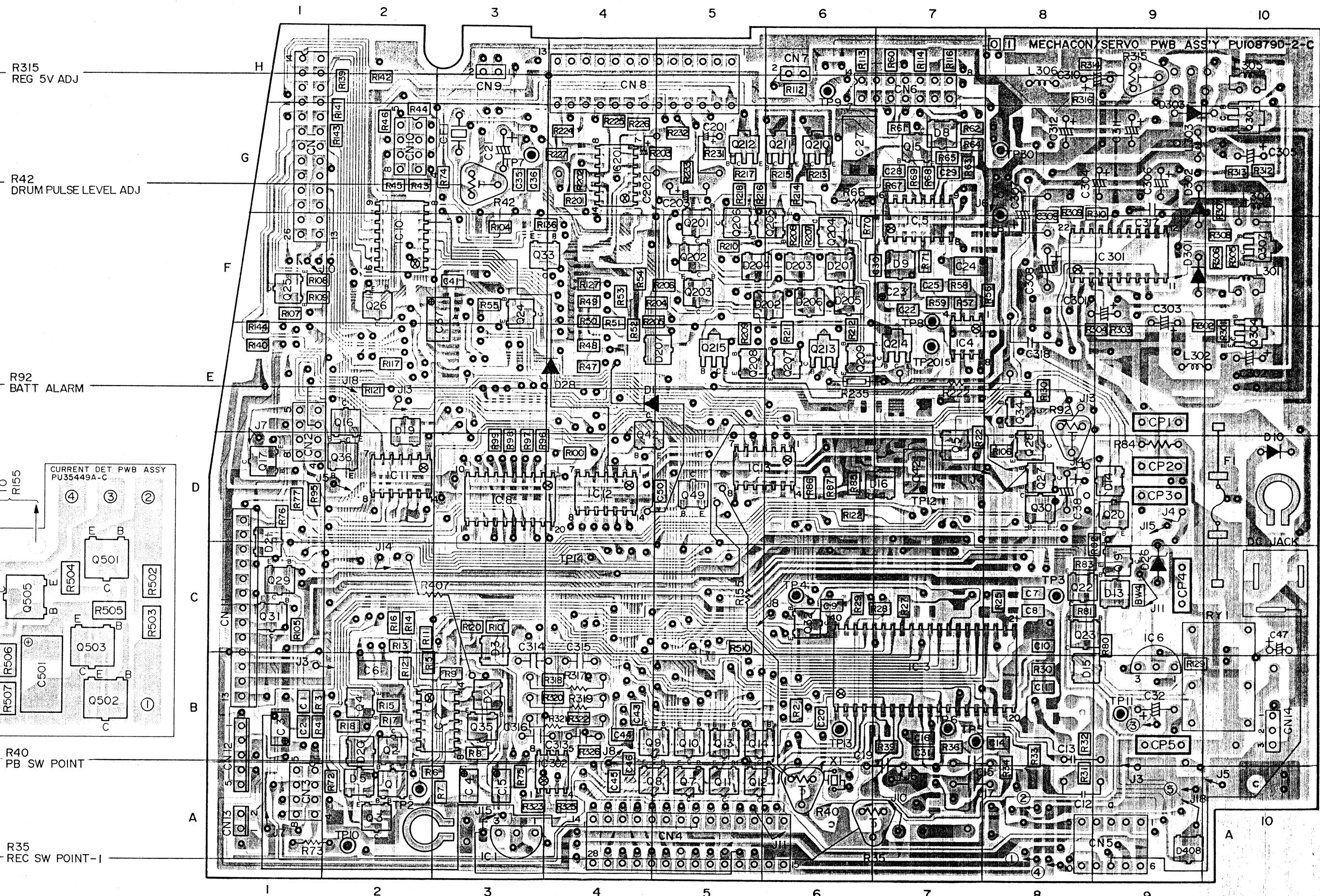
Servo-Regelung Schaltbild
Servo circuit diagram



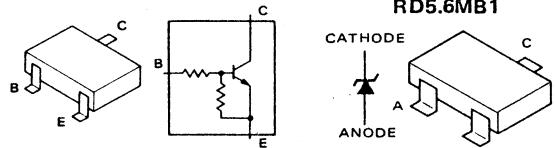
0 1 Platte Servo-Regelung/Mechaniksteuerung
Mechacon/Servo PWB



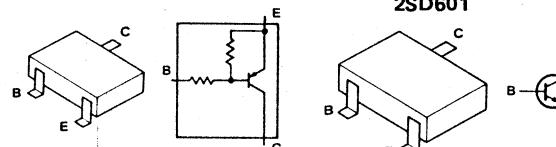
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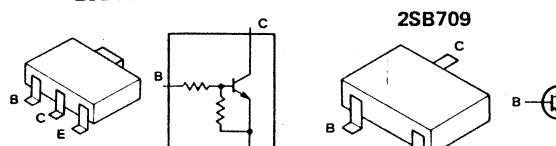
DTC144K



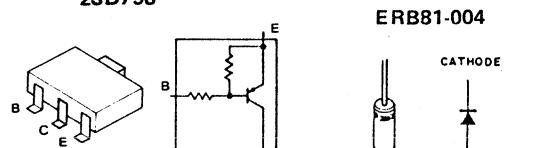
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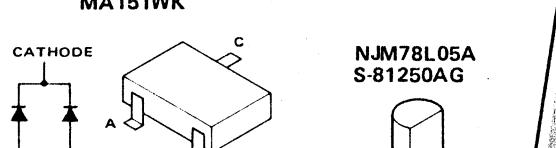
2SD999



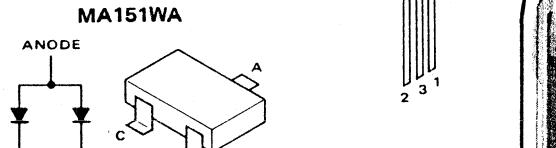
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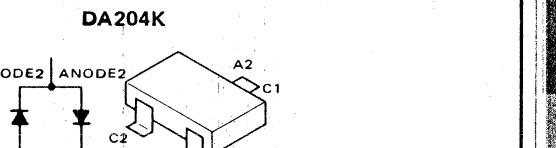
MA151WK



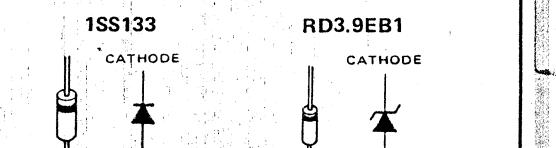
MA151WA



DA204K

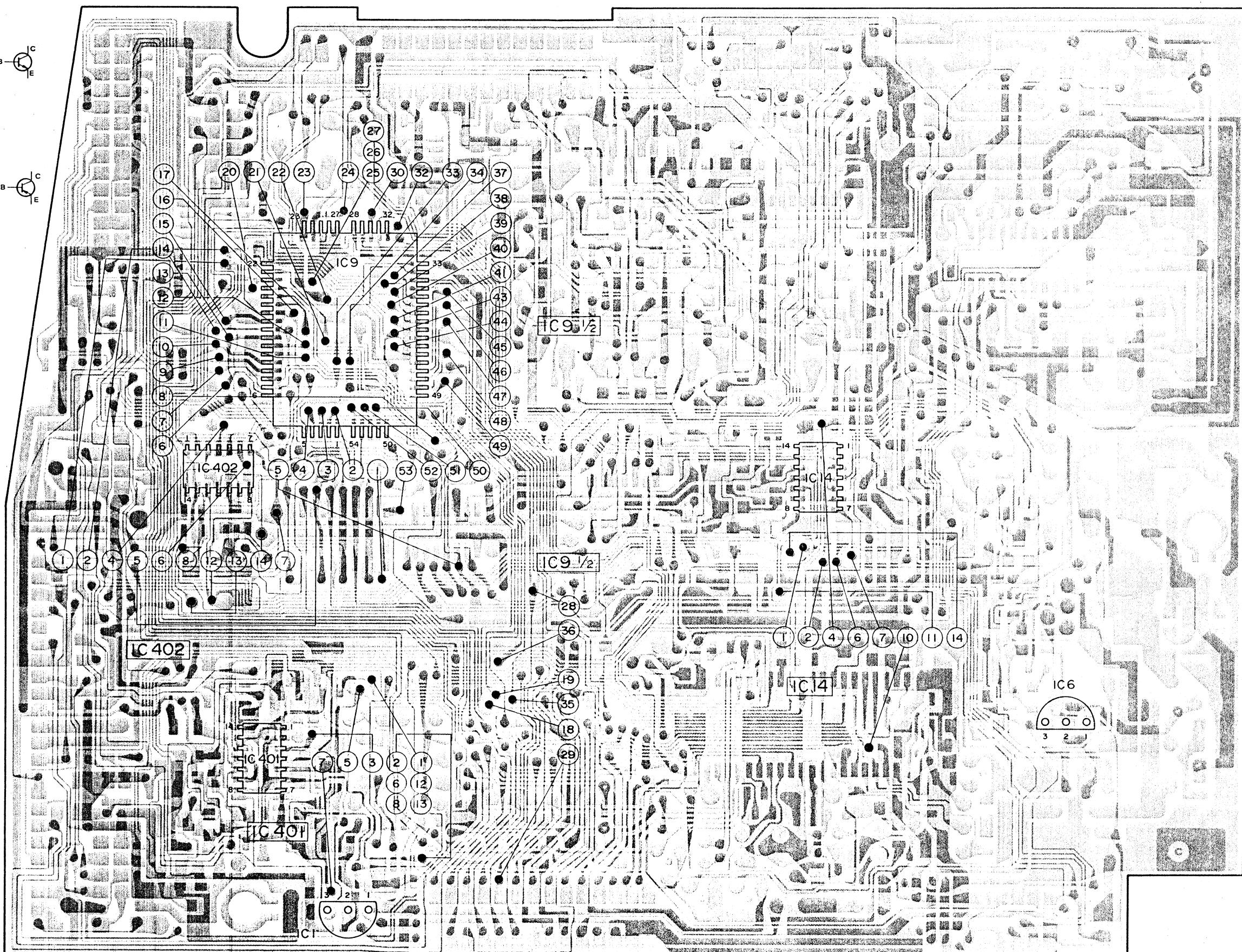


1SS133



HD44860B12

**0 1 Platte Servo-Regelung/Mechaniksteuerung (IC-Anschlüsse)
Mechacon/Servo PWB (IC-Pin location)**



Spannungstabelle

Servoregelung/Mech
Servo/Mechacon PW

MODE	IC No.	STOP	PLAY
IC2	①	3.7	0.8
	②	1.0	2.5
	③	3.2	2.7
	④	5.0	5.0
	⑤	0	1.3
	⑥	0	1.3
	⑦	0	1.3
	⑧	0	0
	⑨	3.1	2.4
	⑩	1.9	1.9
	⑪	0	0
	⑫	3.0	3.0
	⑬	3.1	2.4
	⑭	2.4	3.8
IC4	①	1.4	—
	②	1.4	—
	③	1.4	—
	④	0	—
	⑤	2.0	—
	⑥	4.2	—
	⑦	0	—
	⑧	5.0	—
IC201	①	0	—
	②	5.0	—
	③	5.0	—
	④	0.4	—
	⑤	4.9	—
	⑥	3.6	—
	⑦	3.5	—
	⑧	2.2	—
	⑨	2.2	—
	⑩	0.8	—
	⑪	0.8	—
	⑫	0	—
	⑬	0	—
	⑭	4.2	—
IC301	①	0	—
	②	10.1	—
	③	0.7	—
	④	0.8	—
	⑤	10.2	—
	⑥	0	—
	⑦	0	—
	⑧	0	—
	⑨	0	—
	⑩	0	—
	⑪	10.2	—
	⑫	0	—
	⑬	0	—
	⑭	0	—

Spannungstabellen · DC voltage tables

Servoregelung/Mechaniksteuerung Platte 0 1

Servo/Mechacon PWB 0 1

MODE IC No.	STOP	PLAY	REC	FWD. SEARCH	REV. SEARCH	PLAY PAUSE	REC PAUSE
IC2-1	3.7	0.8	0.9	2.2	2.6	3.8	3.8
2	1.0	2.5	2.4	2.7	2.8	1.0	1.0
3	3.2	2.7	2.5	2.7	2.8	2.4	2.7
4	5.0	5.0	5.0	5.0	5.0	5.0	5.0
5	0	1.3	1.3	2.4	2.4	0	1.3
6	0	1.3	1.3	2.4	2.4	0	1.3
7	0	1.3	1.3	2.4	2.4	0	1.3
8	0	0	0	0	0	0	0
9	3.1	2.4	2.4	2.7	2.8	2.3	2.3
10	1.9	1.9	1.9	1.9	1.9	2.3	2.3
11	0	0	0	0	0	0	0
12	3.0	3.0	3.0	3.0	3.0	2.3	2.3
13	3.1	2.4	2.4	2.7	2.8	2.3	2.3
14	2.4	3.8	3.8	3.8	1.7	1.7	
IC4-1	1.4	—	—	—	—	—	—
2	1.4	—	—	—	—	—	—
3	1.4	—	—	—	—	—	—
4	0	—	—	—	—	—	—
5	2.0	—	—	—	—	—	—
6	4.2	—	—	—	—	—	—
7	0	—	—	—	—	—	—
8	5.0	—	—	—	—	—	—
IC201-1	0	—	—	—	—	—	—
2	5.0	—	—	—	—	—	—
3	5.0	—	—	—	—	—	—
4	0.4	—	—	—	—	—	—
5	4.9	—	—	—	—	—	—
6	3.6	—	—	—	—	—	—
7	3.5	—	—	—	—	—	—
8	2.2	—	—	—	—	—	—
9	2.2	—	—	—	—	—	—
10	0.8	—	—	—	—	—	—
11	0.8	—	—	—	—	—	—
12	0	—	—	—	—	—	—
13	0	—	—	—	—	—	—
14	4.2	—	—	—	—	—	—
IC301-1	0	—	—	—	—	—	—
2	10.1	—	—	—	—	—	—
3	0.7	—	—	—	—	—	—
4	0.8	—	—	—	—	—	—
5	10.2	—	—	—	—	—	—
6	0	—	—	—	—	—	—
7	0	—	—	—	—	—	—
8	0	—	—	—	—	—	—
9	0	—	—	—	—	—	—
10	0	—	—	—	—	—	—
11	10.2	—	—	—	—	—	—
12	0	—	—	—	—	—	—
13	0	—	—	—	—	—	—
14	0	—	—	—	—	—	—
15	0	—	—	—	—	—	—
16	0	—	—	—	—	—	—
17	5.3	—	—	—	—	—	—
18	3.4	—	—	—	—	—	—
19	3.5	—	—	—	—	—	—
20	2.9	—	—	—	—	—	—
21	3.0	—	—	—	—	—	—
22	6.9	—	—	—	—	—	—

MODE IC No.	STOP	PLAY	REC	FWD. SEARCH	REV. SEARCH	PLAY PAUSE	REC PAUSE
IC3-1	4.3	—	—	—	—	—	—
2	4.3	—	—	—	—	—	—
3	4.3	—	—	—	—	—	—
4	0	—	—	—	—	—	—
5	0	0	0	0	0	0	0
6	1.6	—	—	—	—	—	—
7	0.1	—	—	—	—	—	—
8	4.9	—	—	—	—	—	—
9	1.7	—	—	—	—	—	—
10	4.9	—	—	—	—	—	—
11	4.1	—	—	—	—	—	—
12	4.1	—	—	—	—	—	—
13	0.1	—	—	—	—	—	—
14	5.0	5.0	5.0	5.0	5.0	5.0	5.0
15	0.8	—	—	—	—	—	—
16	2.8	2.7	2.4	2.7	2.7	2.7	2.7
17	2.3	—	—	—	—	—	—
18	0.6	—	—	—	—	—	—
19	2.6	—	—	—	—	—	—
20	0.2	—	—	—	—	—	—
21	4.3	—	—	—	—	—	—
22	4.7	—	—	—	—	—	—
23	0	—	—	—	—	—	—
24	4.4	—	—	—	—	—	—
25	4.2	—	—	—	—	—	—
26	4.4	—	—	—	—	—	—
27	4.2	—	—	—	—	—	—
28	0	0	0	0	0	0	0
29	4.5	4.5	0	4.5	4.5	4.5	4.5
30	4.6	4.6	0	4.6	4.6	0	0
31	0.1	0.1	0.1	0.1	5.0	5.1	0.1
32	0	0	0	0	5.1	0	0
33	4.2	4.2	4.2	4.2	4.2	4.2	4.2
34	0	0	0	0	5.1	5.1	0
35	0	—	—	—	—	—	—
36	4.2	—	—	—	—	—	—
37	4.2	—	—	—	—	—	—
38	1.3	—	—	—	—	—	—
39	0	—	—	—	—	—	—
40	0	0	0	0	0	0	0
IC302-1	3.7	2.5	2.5	2.7	2.3	2.4	2.4
2	3.7	2.5	2.5	2.6	2.4	2.4	2.4
3	3.6	2.5	2.5	2.6	2.3	2.4	2.4
4	0	0	0	0	0	0	0
5	3.5	2.4	2.4	2.5	2.2	2.3	2.3
6	3.5	2.4	2.4	0	2.2	2.3	2.3
7	3.5	2.3	2.3	2.4	2.2	2.3	2.3
8	5.0	5.0	5.0	5.0	5.0	5.0	5.0

Spannungstabellen · DC voltage tables

Servoregelung/Mechaniksteuerung Platte 0 1

Servo/Mechacon PWB 0 1

MODE TR No.	STOP			PLAY			REC			FWD. SEARCH			REV. SEARCH			PLAY PAUSE			REC PAUSE		
	B	C	E	B	C	E	B	C	E	B	C</th										

Audio/Servo-Platte 0 4

Audio/Servo PWB 0 4

MODE IC No.	STOP	PLAY	REC	FWD. SEARCH	REV. SEARCH	PLAY PAUSE	REC PAUSE
IC101							
①	0.2	0.1	0.1	0.1	0.1	0.2	0.2
②	9.7	9.7	9.7	9.6	9.6	9.7	9.7
③	0	0	0	0	0.1	0.1	0.1
④	0.1	0.1	0	0.1	0	0	0
⑤	0.1	0	0	0	0.1	0.1	0.1
⑥	0	0	0	0.1	0.1	0	0
⑦	0	0.1	0	0	0.1	0	0.1
⑧	0	0	0	0.1	0	0	0
⑨	0.1	0	0	0	0	0	0.1
⑩	5.0	5.0	5.0	5.0	5.0	5.0	5.0
⑪	5.0	5.0	5.0	5.0	5.0	0	4.9
⑫	0	0	0	0.1	0	0.1	0.2
⑬	0	0	0.1	0.1	0.1	0	0.1
⑭	0	0	0.1	0	0	0	0
⑮	0.1	0.1	0.1	0.1	0.1	0	0
⑯	9.7	9.6	9.7	9.6	9.6	9.7	9.6
IC102							
①	1.9	2.9	2.8	6.2	7.0	9.9	0
②	1.9	2.0	2.0	5.3	6.8	9.5	9.6
③	0	2.9	2.8	6.1	0.2	3.1	0
④	0.1	0.1	0	0.1	5.1	0.1	0.1
⑤	0	0	0	0.1	3.0	0	0
⑥	0	0	0	0	2.5	0	0
⑦	0.1	0.1	0.1	0	0.1	0.1	0.1
⑧	0.1	0	0.1	0	0	0	0
⑨	0	0.1	0.1	0	0.1	0	0
⑩	5.0	4.9	5.0	5.0	5.0	5.0	5.0
⑪	5.0	5.0	5.0	5.0	5.0	5.0	5.0
⑫	0	2.4	2.5	2.4	0.1	0	0
⑬	0.1	3.1	3.1	3.0	0.1	0	0
⑭	0.1	5.1	5.2	5.1	0.1	0	0.1
⑮	0	0.1	0.1	0.1	7.0	0.1	0
⑯	1.9	2.8	2.9	6.1	6.0	9.5	9.6
IC103							
①	0.1	0	0	0.1	0	0	0
②	1.4	1.4	1.4	1.4	1.4	1.4	1.4
③	1.4	1.3	1.4	1.4	1.4	1.4	1.4
④	1.4	1.4	1.3	1.4	1.4	1.3	1.3
⑤	1.4	1.3	1.4	1.3	1.3	1.4	1.4
⑥	4.5	2.6	2.6	2.5	2.5	4.5	4.5
⑦	0.7	0.6	0.7	0.7	3.7	0.7	0.7
⑧	0	0	0.1	0	0.1	0.1	0
⑨	0.2	0.1	0.1	0.1	0	0.2	0.2
⑩	0	1.1	0.9	1.0	0.1	0.1	0
⑪	4.3	2.2	2.2	1.4	1.4	4.2	4.3
⑫	5.0	1.8	1.6	1.6	1.6	5.0	4.9
⑬	3.4	2.9	2.7	2.7	2.7	3.4	3.3
⑭	3.5	2.6	2.6	2.6	2.6	3.3	3.4
⑮	0.7	2.4	2.7	2.8	2.8	0.7	0.7
⑯	5.0	5.0	5.0	5.0	5.0	5.0	5.0
IC104							
①	1.4	1.3	2.5	1.4	1.4	1.4	1.4
②	1.4	1.4	1.5	1.4	1.5	1.4	1.5
③	1.4	1.4	1.6	1.3	1.4	1.4	1.4
④	0	0	0.1	0.1	0.1	0.1	0
⑤	2.0	1.9	2.0	2.0	2.0	2.0	2.0
⑥	0.6	0.6	2.7	2.8	2.8	0.6	0.5
⑦	0	0	0	0	0	0	0
⑧	5.0	5.0	5.0	5.0	5.0	5.0	5.0

MODE IC No.	STOP	PLAY	REC	FWD. SEARCH	REV. SEARCH	PLAY PAUSE	REC PAUSE
IC105							
①	3.9	2.3	2.4	2.4	2.3	2.3	2.6
②	0.7	2.5	2.5	2.6	2.5	2.5	2.5
③	1.7	2.5	2.5	2.6	2.4	2.5	2.6
④	5.0	5.0	5.0	5.0	5.0	5.0	5.0
⑤	0.4	0.4	0.4	0.4	0.4	0.4	0.3
⑥	0.4	0.3	0.3	0.3	0.3	0.3	0.3
⑦	0	0	0.1	0	0	0	0
⑧	0	0	0	0	0	0	0
⑨	3.3	2.5	2.6	2.6	2.5	2.5	2.6
⑩	1.7	1.7	1.7	1.6	1.7	1.7	1.7
⑪	0	0	0	0.1	0.1	0	0
⑫	3.4	3.3	3.3	3.3	3.4	3.3	3.3
⑬	3.4	2.6	2.7	2.6	2.4	2.5	2.6
⑭	3.2	3.9	3.9	3.9	3.8	3.9	3.9
IC106							
①	0.1	0.1	0.1	0.1	0	0	0.1
②	1.4	1.4	1.4	1.4	1.4	1.3	1.4
③	1.5	1.4	1.5	1.4	1.4	1.5	1.4
④	1.4	1.4	1.4	1.4	1.4	1.4	1.4
⑤	1.4	1.4	1.4	1.4	1.4	1.4	1.4
⑥	4.3	2.3	2.3	2.2	2.3	2.2	2.2
⑦	0.7	0.6	0.7	0.7	0.7	0.6	0.7
⑧	0.1	0	0.1	0	0	0	0
⑨	0.1	0.1	0.1	0.1	0.1	0.2	0.2
⑩	0.1	0.2	0.2	0.2	0.2	0.2	0.2
⑪	4.2	2.2	2.2	2.2	2.2	2.2	2.2
⑫	5.0	1.6	1.6	1.5	1.6	1.6	1.5
⑬	3.4	2.7	2.8	2.7	2.8	2.7	2.8
⑭	3.6	2.6	2.6	2.6	2.6	2.6	2.6
⑮	0.7	2.5	2.6	2.6	2.6	2.4	2.5
⑯	5.0	5.0	5.0	5.0	5.0	5.0	5.0

Spannungstabellen · DC voltage tables

Servoregelung/**Mechaniksteuerung** Platte 0 1

Servo/Mechacon PWB 0 1

MODE IC No.	STOP	PLAY	REC	FWD SEARCH	REV. SEARCH	PLAY PAUSE	REC PAUSE
IC1-①	10.1	10.2	10.2	10.1	10.1	10.2	0.2
②	0	0	0	0	0	0.1	0.1
③	4.9	5.0	5.0	5.0	5.0	5.0	5.0
IC5-①	0	0	0	0	0	0	0
②	0	0	0	0	0	0	0.1
③	0	0	0	0	0	0	0.1
④	0.1	0	0	0	0	0	0
⑤	5.0	0	0	0	0	0	0
⑥	0	0	0.1	0	0	0.1	0
⑦	0.1	0	0	0	0	0	0
⑧	5.0	4.9	5.0	5.0	5.0	5.0	5.0
⑨	5.1	4.9	5.0	5.0	5.0	5.0	5.0
⑩	0	0	0.1	0	0	0.1	0
⑪	0.2	0.2	0.3	0.3	0.2	0.2	0.2
⑫	5.0	4.9	4.9	4.9	4.9	4.9	4.9
⑬	0	0	0	0	0	0.1	0.1
⑭	0	1.3	1.4	1.3	1.3	1.3	1.3
⑮	0	2.3	2.4	2.4	2.5	2.4	2.5
⑯	5.0	5.0	5.0	5.0	5.0	5.0	5.1
IC6-①	0	0	0	0	0	0	0.1
②	10.1	10.1	10.0	9.9	9.9	10.0	9.9
③	5.2	0	5.2	0	0	5.1	5.1
IC8-①	5.1	5.1	5.1	5.0	5.1	5.0	5.1
②	5.0	5.0	5.0	5.0	5.0	4.9	4.7
③	5.1	5.2	5.1	5.0	5.0	5.1	5.1
④	0	4.9	5.0	5.0	0	5.0	5.0
⑤	5.1	5.1	5.1	5.0	5.0	5.1	5.1
⑥	5.1	5.0	0	0	0	0.1	0
⑦	5.1	1.1	5.0	5.0	5.0	5.0	5.1
⑧	4.9	0.1	0	0.1	0	0	0
⑨	5.0	5.0	5.0	5.0	5.0	5.0	5.0
⑩	0	0	0	0	0.1	0.1	0
⑪	0	0	0	0	0	0	0
⑫	5.1	5.0	4.9	5.0	5.0	5.0	4.9
⑬	0	0	0	0	0	0	0
⑭	5.1	5.0	5.0	5.0	5.0	5.0	5.1
⑮	5.0	0	0.1	0	0	0	0
⑯	5.0	5.1	5.1	5.0	5.0	5.0	5.1
⑰	5.1	5.0	0	0	0.1	0	5.0
⑱	5.1	5.1	5.0	5.1	5.0	5.1	5.1
⑲	5.1	5.1	5.1	5.1	5.1	5.1	5.1
⑳	5.1	5.1	5.1	5.1	5.0	5.1	5.1
IC9-①	5.1	5.1	5.1	5.0	5.1	5.1	5.1
②	5.1	5.1	0.1	5.1	5.1	5.1	5.1
③	5.1	0.1	0	5.1	5.1	5.1	5.1
④	0.1	5.1	0	5.1	5.1	5.1	0.1
⑤	5.1	5.1	0	5.1	5.0	5.0	0.1
⑥	5.1	5.1	5.2	5.1	5.1	5.1	5.1
⑦	4.9	2.4	0.1	0.6	4.9	0	0
⑧	5.2	0.1	1.3	5.1	1.6	0.1	0
⑨	3.3	0.1	0.1	0.1	0	0	0.1
⑩	3.3	3.3	3.3	3.3	0.1	3.3	3.3
⑪	5.1	5.1	5.1	5.1	5.1	5.1	0
⑫	5.1	5.2	5.1	5.1	5.0	5.1	0
⑬	5.0	5.0	4.9	4.9	4.9	4.9	0
⑭	5.1	5.0	5.0	5.1	5.0	5.0	0

MODE IC No.	STOP	PLAY	REC	FWD. SEARCH	REV. SEARCH	PLAY PAUSE	REC PAUSE
IC9-15	5.1	5.1	5.1	5.0	5.0	5.1	0
16	5.1	5.1	5.1	5.0	5.1	5.1	0
17	5.1	0	0	0	0	0.1	0
18	0	5.1	5.1	5.1	0	0.1	0
19	0	0	0.1	0.1	5.0	0.1	0
20	5.1	0	0	0.1	0	0.1	0
21	0	0	0.1	0	0	0	0
22	0	0	0	0.1	0	0.1	0
23	2.7	2.7	2.7	2.7	2.7	2.7	0
24	2.8	2.9	2.8	2.8	2.8	2.8	0
25	5.2	5.1	5.2	5.1	5.0	5.1	0
26	5.2	5.2	5.2	5.1	5.1	5.1	0
27	5.1	5.1	5.1	5.2	5.1	5.1	0
28	0.1	0.1	0.1	0	0.1	0	0
29	0.1	0	0.1	0	0	0.1	0
30	5.0	4.9	0.1	4.9	5.0	5.0	0.1
31	5.1	5.1	0.1	5.1	5.0	5.1	0.1
32	0.1	0.1	0.1	5.0	5.1	5.0	0
33	5.1	5.1	0.1	5.1	5.1	5.1	0
34	5.1	0.1	5.1	0.1	0.1	0	0
35	0.1	0.2	0.1	5.1	5.1	0.1	0
36	0	2.6	2.6	2.5	2.5	0.1	0
37	0	2.6	2.5	2.6	2.5	2.5	0
38	5.1	5.0	5.1	0	5.1	5.1	0
39	5.1	5.1	5.1	5.0	0	0	0
40	0.1	5.0	5.1	5.1	5.0	0	0
41	5.0	5.1	0	5.0	5.1	0	0
42	5.1	5.0	5.1	5.1	5.1	0	0.2
43	5.1	5.0	5.1	5.0	5.1	0	0
44	5.1	0	0	0.1	0.1	0	0
45	0.6	0.6	0.6	0.6	0.6	0.6	0.6
46	0	0	0.1	0	0	0	0
47	0.1	0	0	0	0	0	0
48	0.1	5.0	5.0	0.1	0.1	0	0
49	0.1	0	0.1	5.0	5.0	0	0
50	5.1	5.1	5.1	5.1	5.0	0	0
51	5.1	5.1	5.1	5.1	5.0	0	0
52	5.1	5.1	5.1	5.0	5.1	0	0
53	5.0	5.1	5.1	5.0	5.1	0	0
54	0	0	0.1	0	0	0	0
IC10-							
1	5.0	0	0	0	0	0.1	0
2	5.0	5.1	5.0	5.1	5.1	0	0
3	5.1	5.0	0	5.0	5.1	5.0	0
4	0.1	5.0	5.0	5.0	5.0	5.1	5.1
5	5.1	5.1	5.0	5.1	0	5.0	5.1
6	5.1	5.1	5.0	0	5.0	5.1	5.1
7	5.0	5.0	0	4.9	5.0	5.0	5.0
8	0	0	0.1	0	0.1	0	0.1
9	5.0	5.0	5.0	5.0	5.0	5.0	5.0
10	7.5	5.0	0	5.2	5.1	5.0	7.6
11	0.6	3.9	1.3	0.1	0.7	3.8	0.6
12	0.6	3.8	0.7	0.7	0	3.8	0.6
13	0.1	3.9	0.7	0.6	0.7	3.9	0.6
14	0.6	3.8	0	0.6	0.7	3.9	0
15	3.9	3.9	3.8	3.8	3.9	0.1	0
16	3.8	0.1	0.1	0	0	0.0	0.1

Servoregelung/Mechaniksteuerung Platte 0 1
Servo/Mechacon PWB 0 1

MODE IC No.	STOP	PLAY	REC	FWD. SEARCH	REV. SEARCH	PLAY PAUSE	REC PAUSE
IC11-							
①	5.1	5.1	5.1	5.1	5.1	5.1	5.1
②	0	0	0	0	0	0.1	0.1
③	5.2	5.1	5.0	5.1	5.1	5.1	5.1
④	5.1	5.1	5.1	5.0	5.1	5.1	5.1
⑤	0	0	0	0	0.1	0	0
⑥	5.1	5.1	5.0	5.1	5.1	5.1	5.1
⑦	0.1	0	0.1	0	0	0.1	0.1
⑧	5.1	5.1	5.1	5.0	5.0	5.1	5.1
⑨	5.1	5.1	5.2	5.1	5.1	5.1	5.2
⑩	5.1	5.1	5.1	5.1	5.1	5.1	5.1
⑪	0	0	0	0.1	0	0	0
⑫	0.1	0.1	0.1	0	0	0	0.1
⑬	0	0.1	0	0	0.1	0	0
⑭	5.1	5.1	5.2	5.1	5.1	5.1	5.1
IC12-							
①	5.1	0	0	5.1	5.1	5.1	5.2
②	5.0	5.0	0.1	5.0	5.0	5.0	5.0
③	0	5.1	5.1	0.1	0	0.1	0.1
④	0.1	0	0.1	0	0.1	0	0.1
⑤	5.1	5.1	5.1	5.1	5.1	5.1	5.1
⑥	5.2	5.2	5.1	5.1	5.0	5.1	5.1
⑦	0	0	0	0	0	0.1	0.1
⑧	2.6	0.9	0.1	0.6	0.7	3.8	0.1
⑨	0	0	0	0	0	0	0.1
⑩	5.1	5.1	5.2	5.2	5.2	5.2	5.1
⑪	0	5.1	5.1	5.1	5.1	5.1	5.1
⑫	5.1	5.1	0.1	5.1	5.1	5.1	0.1
⑬	5.1	0	5.1	0.1	0.1	0	5.1
⑭	5.1	5.2	5.1	5.1	5.1	5.1	5.1
IC13-							
①	5.1	5.1	0	5.1	5.1	5.1	5.1
②	0	0	5.1	0	0.1	0	0
③	0.9	4.1	0.9	3.6	3.5	2.2	0.8
④	0.4	0.1	1.7	0.1	1.4	4.8	5.1
⑤	1.3	1.2	1.2	3.3	1.3	4.5	4.6
⑥	0.3	0	0.1	1.6	4.9	0.1	0
⑦	0.1	0	0	0	0	0	0
⑧	0	0.1	0.1	0	0.1	0	0
⑨	5.1	5.1	5.1	5.1	5.1	5.1	5.2
⑩	5.1	5.2	5.1	5.1	5.1	5.1	5.1
⑪	0.1	0	0	0.1	0	0	0
⑫	0.1	0	0	0	0	0	0.1
⑬	4.9	4.9	4.9	4.9	4.9	4.9	4.9
⑭	5.2	5.2	5.1	5.1	5.1	5.1	5.2
IC14-							
①	0	0	0	0	0	0	0
②	3.0	3.0	3.0	3.0	3.0	0.1	3.0
③	2.5	2.5	2.5	2.5	2.5	0	2.5
④	5.0	5.0	5.0	5.0	5.0	0	5.0
⑤	2.5	2.5	2.6	2.5	2.5	0	2.5
⑥	2.9	2.9	2.9	2.9	2.8	0	2.9
⑦	0	0	0	0	0	0	0
⑧	0.7	0.7	0.7	0.8	0.7	0	0
⑨	1.4	1.4	1.4	1.5	1.4	0	0
⑩	0.6	0.6	0.6	0.6	0.6	0	0.6
⑪	0	0	0	0	0	0	0
⑫	0.1	0.1	0.1	0.1	0.1	0	0.1
⑬	2.5	2.5	2.5	2.5	2.4	0.1	2.5
⑭	0	0	0.1	0	0	0	0

MODE IC No.	STOP	PLAY	REC	FWD. SEARCH	REV. SEARCH	PLAY PAUSE	REC PAUSE
IC401-							
①	4.9	0	0	0	0.1	0	0
②	0.1	0.1	0	0	0	0	0
③	5.0	5.0	5.0	4.9	4.9	0	0
④	5.0	5.0	5.0	5.0	4.9	0	0.1
⑤	0.1	0	0.1	0	0.1	0	0
⑥	0.1	5.0	5.1	5.0	4.9	0	0
⑦	0	0	0.1	0.1	0	0	0
⑧	5.0	0.1	0	0	0	0	0
⑨	5.0	0	0.1	0	0.1	0	0
⑩	0.1	5.0	5.0	0	4.9	0	0
⑪	5.0	5.0	5.0	5.0	5.0	0	0
⑫	0	0	0.1	0	0	0	0
⑬	0	0	0	0	5.0	0	0
⑭	5.0	5.0	5.0	5.0	5.0	0	0
IC402-							
①	4.8	4.8	4.8	4.8	0	4.8	0
②	4.8	4.8	—	4.8	4.8	4.8	0
③	4.9	4.9	4.9	4.9	4.9	4.9	0
④	0	0	0	0	0	0	0
⑤	0	0	0	0	0	0	0
⑥	0	0	0	0	0	0	0
⑦	0	0	0	0	0	0	0
⑧	4.9	4.9	4.9	4.9	4.9	4.9	4.9
⑨	4.9	4.9	4.9	4.9	4.9	4.9	0
⑩	4.9	4.9	4.9	4.9	4.9	4.9	4.9
⑪	4.9	4.9	4.9	4.9	4.9	4.9	4.9
⑫	5.0	5.0	5.0	5.0	5.0	5.0	5.0
⑬	4.8	0	4.8	4.8	4.8	4.8	0
⑭	4.9	4.9	4.9	4.9	4.9	4.9	4.9

Spannungstabellen - DC voltage tables

Servoregelung/Mechaniksteuerung Platte 0 1

Servo/Mechacon PWB 0 1

TR No.	MODE			STOP			PLAY			REC			FWD. SEARCH			REV. SEARCH			PLAY PAUSE			REC PAUSE				
	B	C	E	B	C	E	B	C	E	B	C	E	B	C	E	B	C	E	B	C	E	B	C	E		
Q 5	0	4.6	0	5.1	0.1	0.1	0	4.6	0	5.1	0.1	0	5.1	0	0	5.1	0.1	0	0.1	4.6	0.1	0.1	4.6	0.2	5.0	
Q15	5.0	0	5.1	5.0	0.1	5.0	5.0	0.2	5.0	4.9	0.1	5.0	5.0	0.1	4.9	5.0	0.1	5.0	5.0	0.1	5.0	5.0	0.2	5.0	0.2	5.0
Q16	5.1	0.1	0	0.1	4.6	0	5.1	0	0	4.6	0	0	4.6	0	0	4.6	0	0	4.5	0	0.1	5.1	0.1	0	0	0
Q19	10.2	0	10.1	10.1	0.1	10.2	10.1	0	10.2	10.1	0.1	10.1	10.1	0	10.1	10.1	0	10.1	10.2	0	10.1	10.2	0	10.1	10.2	0
Q20	5.2	0	5.2	5.1	0.1	5.2	5.1	0	5.1	5.1	0	5.1	5.1	0.1	5.1	5.1	0.1	5.1	5.1	0.1	5.1	5.1	0.1	5.2	5.1	0.1
Q22	0	10.2	0	0	10.2	0	0	10.1	0	0	10.1	0	0	10.1	0	0	10.1	0	0	10.2	0	0	10.2	0	0	
Q23	0.1	10.2	0	0	10.1	0.1	0.1	10.2	0	0	10.1	0	0	10.1	0	0	10.2	0	0	10.1	0	0	10.1	0	0	
Q24	3.7	0.1	0.1	0.1	2.5	0	0	2.5	0	1.2	10.1	0	5.1	3.8	0.1	0	2.5	0.1	0	2.9	0	0	2.9	0	0	
Q25	3.9	5.1	3.3	3.8	5.2	3.3	3.9	5.1	3.4	3.9	5.2	3.4	3.9	5.1	3.3	3.8	5.2	3.4	3.9	5.1	3.4	3.9	5.1	3.4	3.9	5.1
Q26	5.0	0.1	0	5.0	0	0	0.1	3.3	0	5.0	0.1	0	5.0	0	0	5.0	0.1	0	5.0	0.1	0	5.0	0.1	0	5.0	0.1
Q27	4.7	0	0	0.1	7.1	0	4.6	0.1	0	0	7.1	0	0.1	7.1	0	0	7.0	0	0	4.6	0.1	0	4.6	0.1	0	
Q28	0	5.0	0	0.1	4.9	0	3.7	0	0	0	5.0	0	0.1	5.0	0	0.1	5.0	0.1	0.1	5.0	0.1	0.1	5.0	0.1	0.1	
Q29	0	2.0	0	5.1	0	0	5.1	0	0	5.1	0	0	5.1	0	0.1	5.1	0.1	0	5.1	0.1	0	5.1	0.1	0		
Q30	0.1	2.7	0	3.6	0	0	3.6	0	0	3.5	0.1	0.1	3.5	0	0	3.6	0	0	3.6	0	0	3.6	0	0		
Q31	5.1	0	0	5.1	0	0.1	0	0.1	0	5.1	0	0	5.1	0	0	5.1	0	0	0	0.1	0	0	0.1	0		
Q33	0	5.1	0	2.1	2.5	0	2.1	2.6	0	2.1	0.5	0	2.0	2.6	0	2.1	2.5	0	2.1	2.6	0	2.1	2.6	0		
Q34	5.0	0	0	5.0	0	0	5.0	0	0	5.0	0	0	5.0	0	0	5.0	0	0	5.0	0	0	5.0	0	0		
Q36	0	5.0	0	4.5	0.1	0	0.1	5.0	0	4.6	0.1	0.1	4.6	0.1	0.1	4.6	0	0.1	0	5.1	0	0	5.1	0		
Q37	0	0.1	0.1	4.1	0	0	4.2	0	0	4.2	0	0	4.2	0	0	4.2	0	0	4.2	0	0	4.2	0	0		
Q38	0	4.2	0	0.1	0.1	0	0.1	4.2	0	0.1	4.2	0.1	0	4.2	0.1	0	4.2	0	0	4.2	0	0	4.2	0.1		
Q39	0.1	0	0	0	1.6	0	0.1	1.5	0	0	1.6	0	0	1.5	0	0	1.5	0.1	0.1	1.6	0.1	0.1	1.6	0.1		
Q40	0.5	0	0	0.1	2.5	0	0	2.6	0	0.1	2.5	0	0	2.5	0.1	0.1	2.5	0	0	2.9	0.1	0	2.9	0.1		
Q41	5.1	3.8	0	5.1	3.8	0	0	2.1	0	5.1	3.8	0	0	2.5	0	0.1	3.8	0.1	0.1	5.1	3.8	0	5.1	3.8	0	
Q42	0	10.2	0	0.1	10.1	0	0	10.1	0	0.1	2.5	0	0	10.1	0	0	10.1	0	0	10.2	0	0	10.2	0		

Servoregelung/Mechaniksteuerung Platte 0 1 (Steckeranschlüsse)

Servo/Mechacon PWB 0 1 (Connectors)

CN No.	MODE						
	STOP	PLAY	REC	FWD. SEARCH	REV. SEARCH	PLAY PAUSE	
CN1-①	3.8	3.8	3.8	3.8	3.9	0	0.1
②	3.8	0.1	0.1	0	0.1	0	0
③	0.6	3.9	0	0.7	0.7	3.9	0.1
④	5.1	5.1	5.1	5.1	5.1	5.1	5.1
⑤	5.1	5.1	5.0	5.0	5.1	5.0	4.9
⑥	5.1	5.2	5.1	5.1	5.1	5.1	5.1
⑦	0.1	2.5	0.1	0	4.2	4.9	4.9
⑧	0.1	0	0	0.1	0	0	0.1
⑨	0	0	0	0	0.1	0.1	0.1
⑩	5.0	5.0	5.0	0.1	5.0	5.0	5.0
⑪	0	0	0.1	0.1	0.1	0	0
⑫	0	0.1	0	0	0	0	0
⑬	0	0	3.3	0	0.1	0	0
⑭	0.1	3.8	3.9	0.6	0.7	3.8	0.6
⑮	0.6	3.8	0.7	0.7	0	3.9	0.6
⑯	0.6	3.8	0.7	0	0.7	3.9	0.6
⑰	5.1	5.1	5.1	5.1	5.1	5.1	5.1
⑱	5.1	5.2	5.1	5.0	5.1	5.1	5.2
⑲	5.0	5.1	5.1	5.0	5.1	5.1	5.1
⑳	5.1	5.1	5.1	5.1	5.2	5.2	5.1
㉑	3.4	3.4	3.4	3.2	3.4	3.3	3.4
㉒	3.3	0.1	0.1	0.1	0.1	0	0.1
㉓	3.4	0	3.3	3.3	0	3.3	0
㉔	0	0.1	0.1	0	0	0	0
㉕	0	0	0	0	0	0	0
㉖	0	0.1	0	0	0.1	0.1	0

CN No.	MODE						
	STOP	PLAY	REC	FWD. SEARCH	REV. SEARCH	PLAY PAUSE	
CN2-①	4.0	3.9	2.6	4.0	4.0	3.9	4.0
②	0.1	4.6	0.1	4.6	4.5	4.6	0
③	5.0	0.1	5.0	0.1	0.1	0.1	5.0
④	5.1	5.0	5.0	5.0	5.0	5.0	5.0
⑤	3.0	2.7	2.7	2.6	2.6	2.6	2.8
⑥	0.4	0.4	0.4	0.4	0.4	0.4	0.4
⑦	6.7	6.7	6.4	6.6	6.7	6.3	6.7
⑧	0	0	0.1	0.1	0	0.1	0
CN3-①	3.1	0	0.1	0.1	0.1	0	0
②	2.0	0	0.1	0	0	0.1	0
③	4.2	0.1	0	5.1	5.1	5.0	0.1
④	0	5.0	5.0	5.0	5.0	5.0	5.0
⑤	3.1	4.0	3.8	4.0	4.1	3.9	4.0
⑥	2.0	0	0.1	0.1	0	0	0.1
⑦	4.2	2.2	2.1	2.1	2.1	2.1	2.1
⑧	0	0	0.1	0	0	0.1	0.1

Servoregelung/Mechaniksteuerung Platte 0 1 (Steckeranschlüsse)

Servo/Mechacon PWB 0 1 (Connectors)

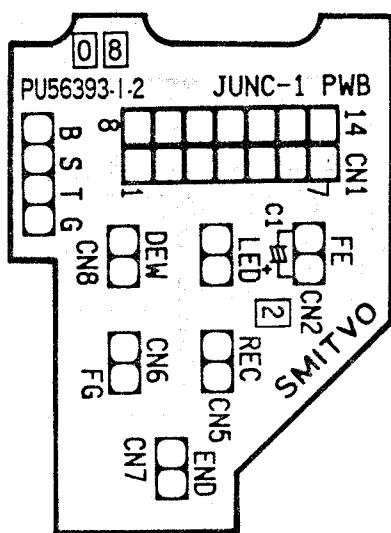
MODE CN NO.	STOP	PLAY	REC	FWD. SEARCH	REV. SEARCH	PLAY PAUSE	REC PAUSE
CN4-①	0.6	2.5	2.4	2.6	2.4	2.5	2.5
②	0.5	2.8	2.8	2.7	2.8	4.6	4.5
③	0	0	0	0	0.1	0	0
④	4.8	2.6	2.6	2.6	4.7	4.7	
⑤	4.2	2.3	2.3	1.4	1.4	4.3	
⑥	0.1	0.1	0.1	0.1	5.1	0.1	0
⑦	0.1	0.1	0.1	5.1	5.1	0.1	0.1
⑧	0.1	5.2	5.2	5.1	0.1	0	0.1
⑨	5.0	0	0	0.1	0	0	0
⑩	0.1	0.1	0.1	0	0	0	0.1
⑪	3.9	2.3	2.3	2.4	2.4	2.3	2.6
⑫	0.7	2.7	2.7	2.8	2.9	0.7	0.8
⑬	0	0.1	0	0	0.1	0.1	0.1
⑭	0.1	2.1	2.1	2.1	2.2	2.1	2.1
⑮	0.1	0	0	0	0	0.1	0
⑯	10.2	10.1	10.1	10.1	10.1	10.1	10.2
⑰	0	0	0	0	0.1	0	0.1
⑱	5.0	5.0	5.0	5.0	5.0	5.0	
⑲	0.1	0	0	0.1	0	0	0
⑳	1.8	2.8	2.8	5.9	6.9	10.0	10.0
㉑	0	0.1	0.1	0	0	0	0
㉒	0	0.1	0	0	0.1	0.1	0
㉓	4.9	0	0	0.1	0	0.1	0
㉔	0.1	0	5.0	5.0	0	5.0	5.0
㉕	0.1	0.1	0	0	0	0.1	0.1
㉖	1.0	0.9	2.4	0.9	1.0	1.0	1.0
㉗	3.0	3.1	2.3	2.1	2.4	2.2	2.3
㉘	0	0	0.1	0	0.1	0	0
CN5-①	0.1	4.2	0.1	4.1	4.1	4.1	0
②	0	0.1	5.1	0.1	0	0	0
③	0.1	5.1	5.1	0	0.1	0.1	0.1
④	0	0.1	0	0	0.1	0	0
⑤	5.0	5.0	5.0	5.0	5.0	5.0	
⑥	6.5	6.7	6.4	6.7	6.7	6.4	6.6
⑦	0.3	0.9	0.3	0.7	0.8	0.2	0.2
⑧	0.1	0	0	0	0	0.1	0.1
⑨	5.0	0.1	0	0.1	0	0	0
⑩	0.1	2.3	2.4	2.3	2.3	2.3	2.3
CN6-①	0.2	0.2	0.2	0.1	0.1	0.1	0.2
②	0	0.1	0	0	0	0	0
③	0	0	0	0.1	0.1	0	0
④	0	0	0.1	0.1	0	0	0.1
⑤	0.1	0.1	0.1	0.1	0.1	0.1	
⑥	0.2	0.5	0.3	0.7	0.8	0.3	0.2
⑦	0.1	0.4	0.1	1.1	0.7	0.2	0.1
⑧	0.9	0.8	1.0	1.6	4.3	0.8	0.9
⑨	4.6	4.6	4.4	1.2	1.9	1.4	1.3
⑩	2.1	2.2	2.2	2.2	2.1	2.2	2.1
⑪	0	0	0	0.1	0	0	0
⑫	0.5	0.4	0.4	0.5	0.4	0.5	0.4
⑬	5.1	5.0	5.0	5.0	5.0	5.0	
⑭	0.1	0.1	0	0	0.1	0	0
CN7-①	0	0	0.1	0.1	0.1	0	0.1
②	0	0.1	0.1	0	0	0	0

MODE CN NO.	STOP	PLAY	REC	FWD. SEARCH	REV. SEARCH	PLAY PAUSE	REC PAUSE
CN8-①	0	0	0	0.1	0	0.1	0
②	0	0	0	0.1	0	0.1	0
③	0	0	2.9	2.9	3.0	3.0	3.3
④	0.1	2.8	2.8	2.9	3.0	2.9	3.3
⑤	0.1	2.9	3.0	3.0	3.0	3.0	3.3
⑥	3.6	3.5	3.6	3.6	3.6	3.6	3.6
⑦	4.3	4.3	4.3	4.3	4.4	4.3	4.2
⑧	3.6	3.6	3.6	3.5	3.7	3.6	3.6
⑨	0.9	0.8	0.8	0.8	0.9	0.8	0.8
⑩	0	0	0	0	0	0	0
⑪	2.2	2.2	2.2	2.2	2.4	2.2	2.2
⑫	0.8	0.8	0.8	0.8	0.8	0.8	0.8
⑬	2.3	2.2	2.2	2.3	2.2	2.2	2.3
CN9-							
①	0.1	0	0	0	0	0	0
②	0.1	0.1	0	0.1	0	0	0
CN10-							
①	4.3	2.2	2.1	2.1	2.1	2.1	2.1
②	4.3	2.8	2.7	2.6	2.9	2.4	2.9
③	6.5	4.6	2.4	5.0	5.2	5.2	2.4
④	6.4	4.5	2.3	5.4	5.0	5.2	2.2
⑤	0	0.1	0.1	0	0	0	0
⑥	0.1	5.0	2.3	5.1	4.3	5.0	2.1
⑦	6.5	4.4	2.4	5.1	5.3	0	1.4
⑧	0	0	0.1	0.1	0	0	0
CN11-							
①	5.0	5.0	0.1	0	0	0.1	5.0
②	5.2	5.2	5.1	5.1	5.1	5.1	5.1
③	0.1	0.1	0	0.2	0.2	0.2	0.1
④	2.9	3.9	3.8	4.1	4.1	3.9	4.2
⑤	0	0.1	0	0	0	0	0
⑥	0.1	0	0.1	0	0	0.1	0
⑦	0	0	0	0	0	0.1	0.1
⑧	0.1	0	0	0	0	0	0
⑨	5.0	5.0	5.0	5.0	5.0	5.0	5.0
⑩	6.6	6.4	6.4	6.7	6.6	6.4	6.9
⑪	0.1	0	0	0	0.1	0	0.1
⑫	10.1	10.1	10.1	10.1	10.0	10.1	10.1
⑬	5.1	5.2	5.2	5.1	5.1	5.1	5.1
CN12-							
①	5.1	5.2	5.1	5.1	5.2	5.2	5.1
②	0.1	0	0	0	0	0	0
③	0.5	2.8	2.8	3.2	2.6	2.5	4.6
④	0	2.8	2.8	2.4	2.7	2.5	4.5
⑤	0.1	0	0	0	0	0.1	0.1

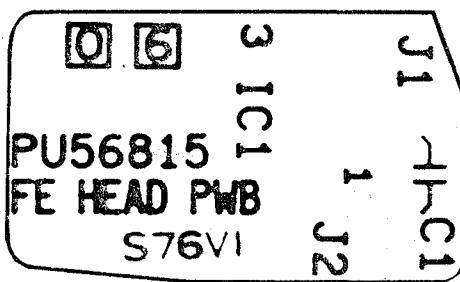
0 4 Audio/Servo Platte (Steckeranschlüsse)
Audio/Servo PWB (Connectors)

MODE CN No.	STOP	PLAY	REC	FWD. SEARCH	REV. SEARCH	PLAY PAUSE	REC PAUSE
CN2 ①	7.9	5.1	7.5	5.3	5.3	5.3	7.9
	②	7.9	5.1	7.5	5.3	5.4	8.0
CN3 ①	0	0	0	0	0	0	0
	②	0	0	0	0	0	0.1
	③	0	0	0	0	0.1	0.1
CN4 ①	0	0	0	0.1	0.1	0	0
	②	4.3	4.2	4.3	4.2	4.2	4.3
	③	2.0	1.8	1.8	1.7	1.6	1.6
CN5 ①	0	0	0	0	0	0.1	0
	②	0	0	0	0	0	0
	③	7.9	7.9	7.7	7.9	8.0	7.9
CN11 ①	5.0	0	0.1	0	0	0	0
	②	5.0	0.1	0.1	0	5.0	5.0
	③	0	5.0	5.1	4.9	5.0	5.0
	④	0	0	0.1	0	0	0
CN12 ①	2.4	0.1	0.1	2.5	0	2.3	0.2
	②	0	0	0	0.1	0	0
	③	0.1	0.1	0	0.1	0.1	0
CN13 ①	0	0.1	0.1	0	0	0	0
	②	0	0.1	0	0	0.1	0
CN14 ①	0	0	0	0	0.1	0	0.1
	②	0	0	0.1	0	0.1	0.1
	③	0.1	2.2	2.2	5.8	0.1	1.8
	④	0	0.1	0	0.1	0	0.1
	⑤	0	0	0.1	0.1	6.3	0.1

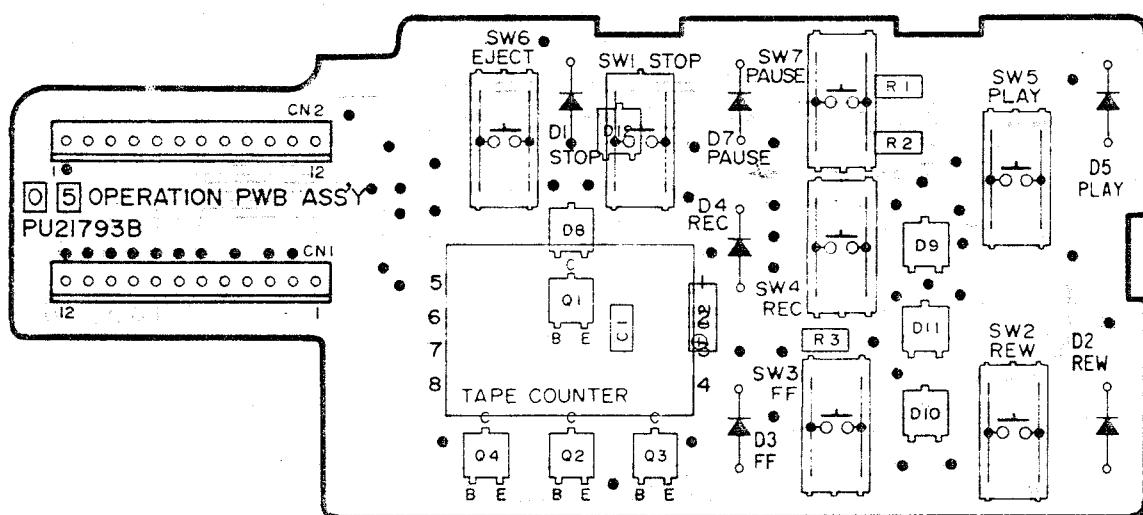
0 8 Verbindungsplatte
Junction PWB



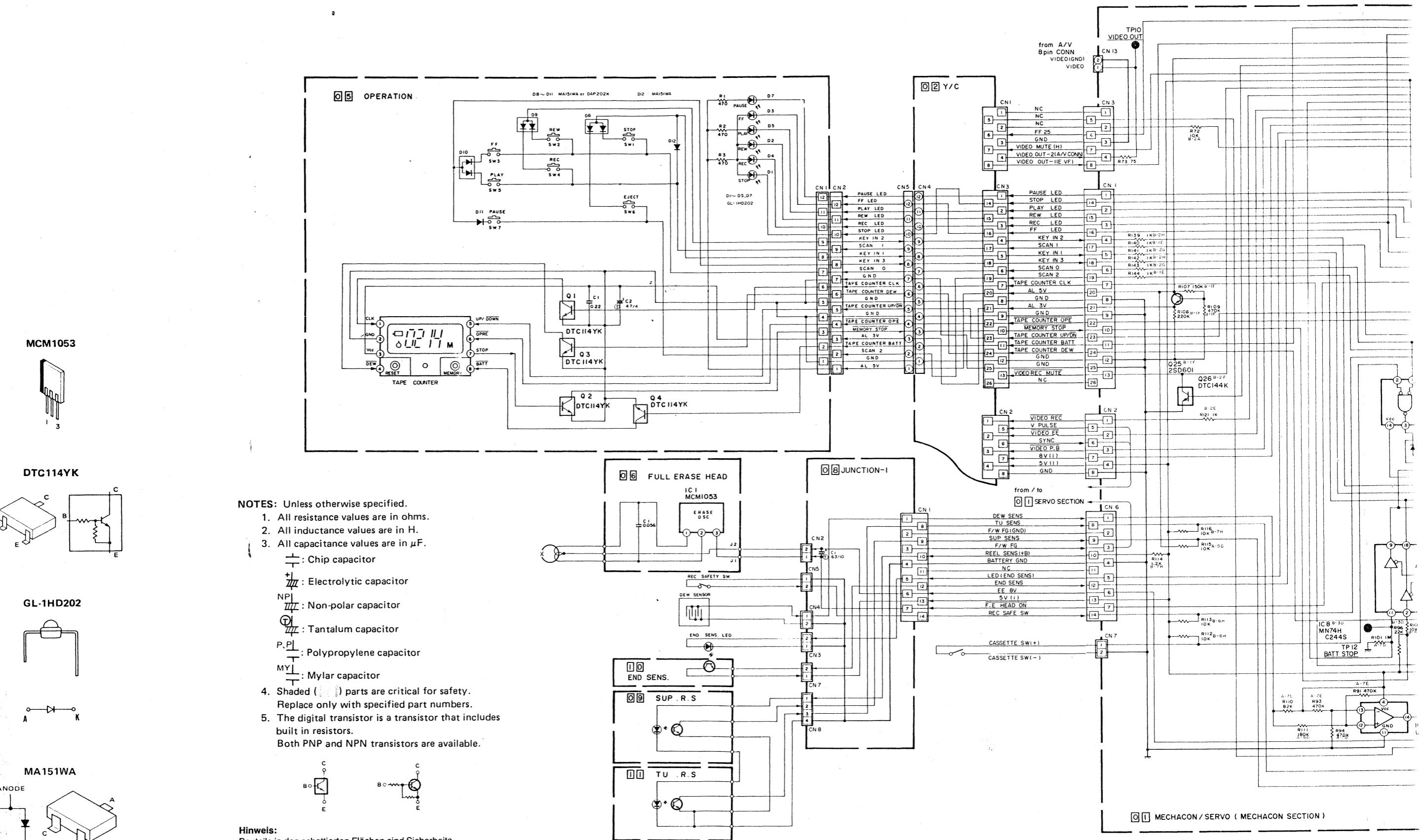
0 6 Löschkopfplatte
Full erase head PWB

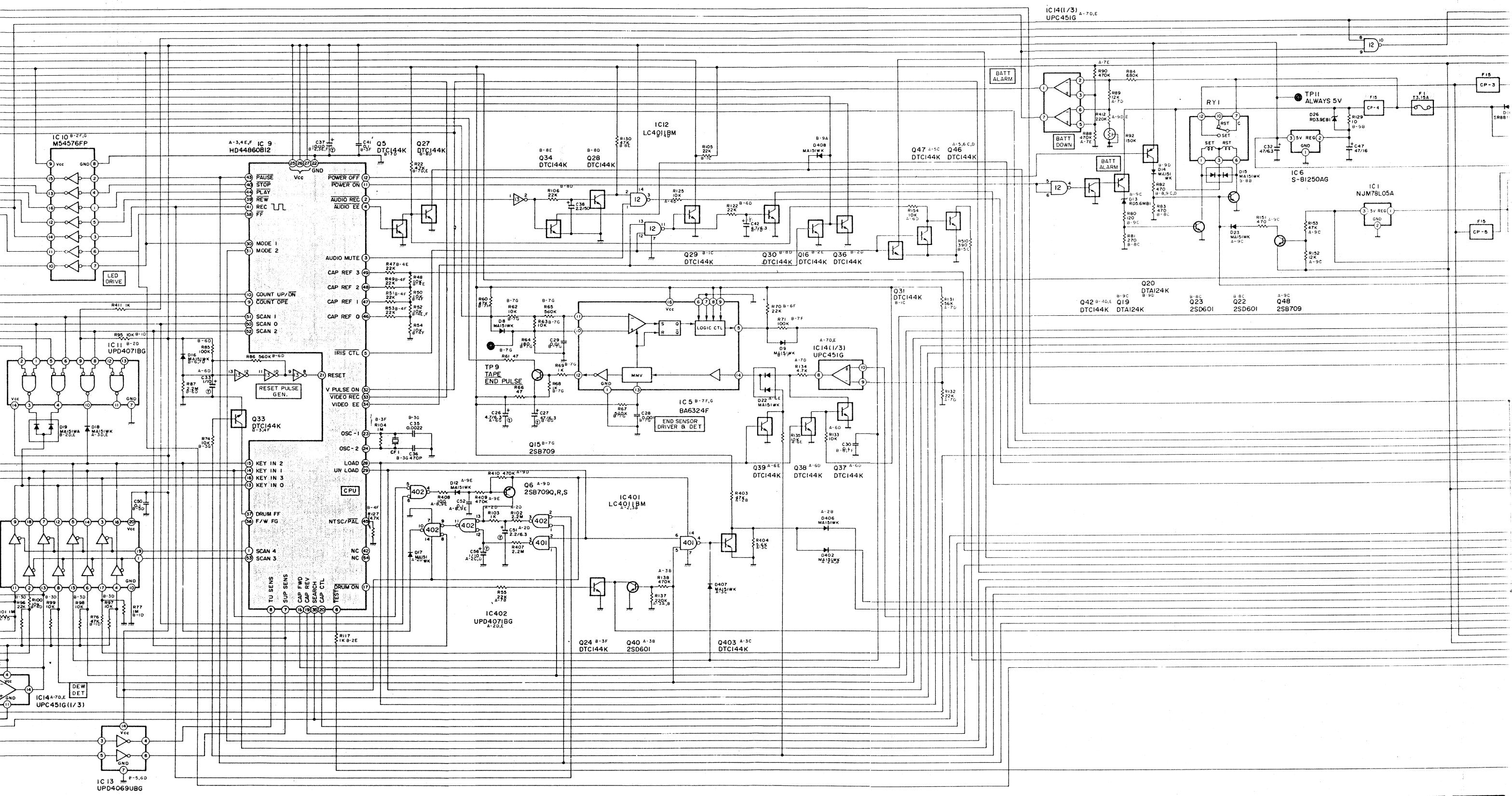


0 5 Tastenplatte
Operation PWB

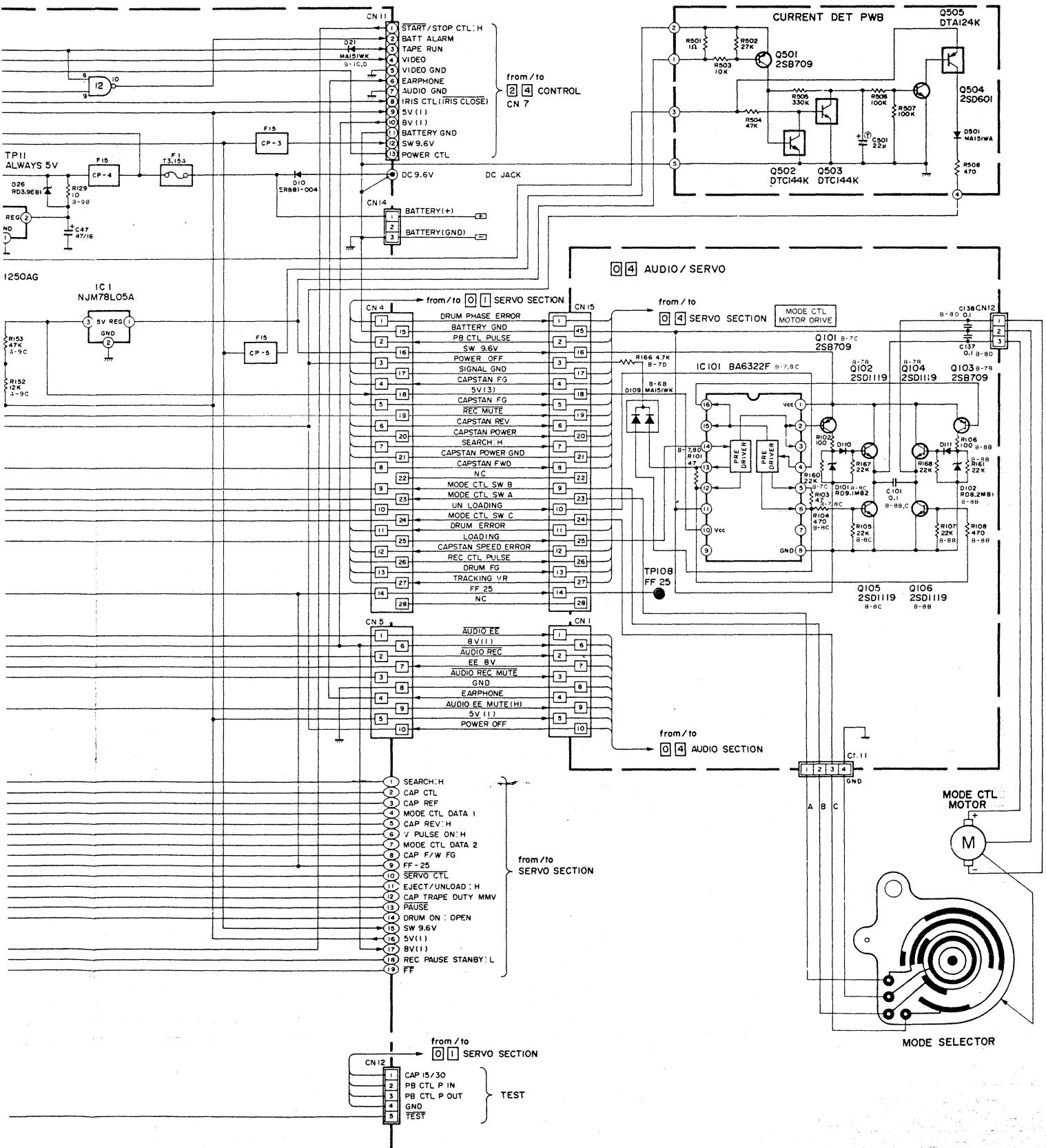


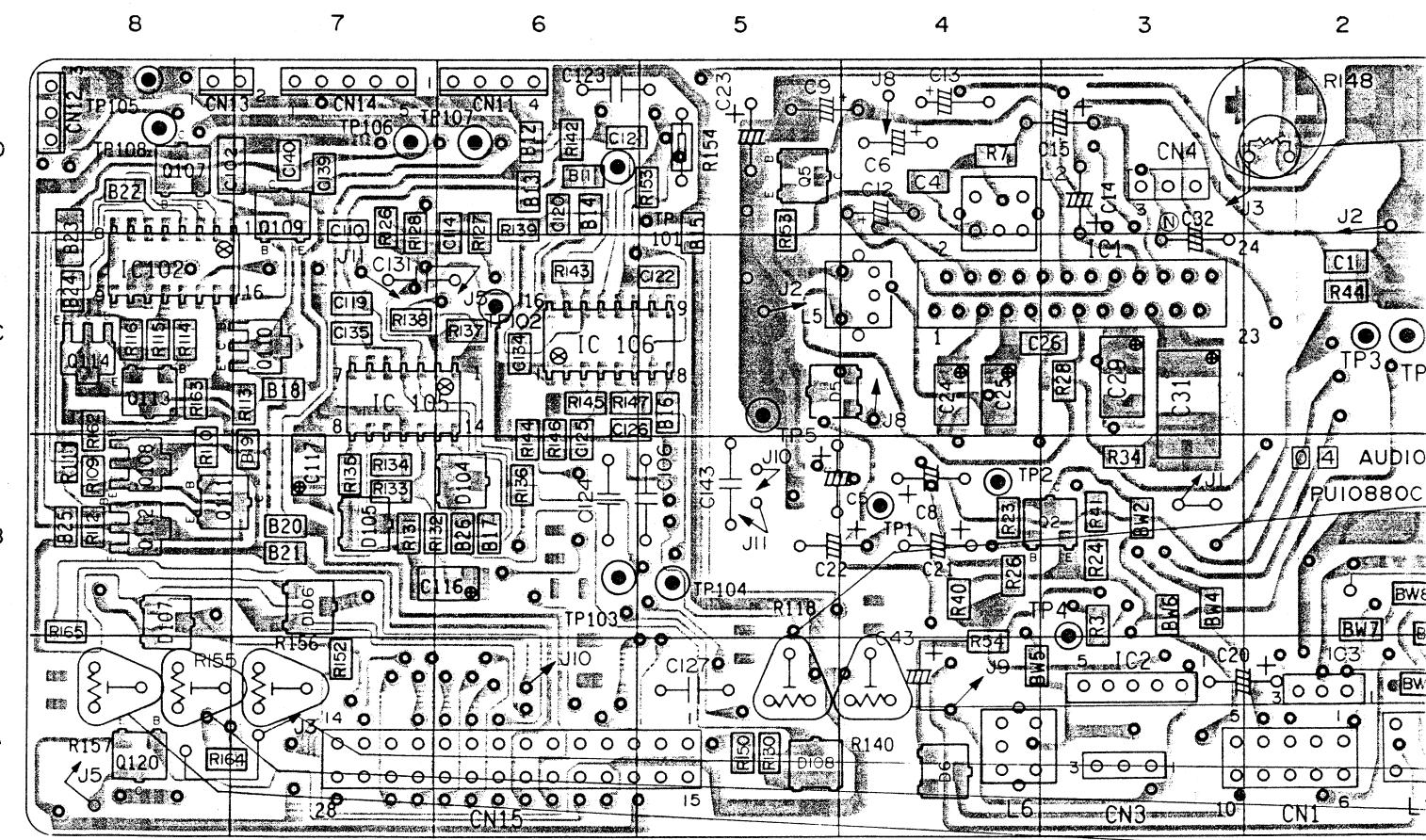
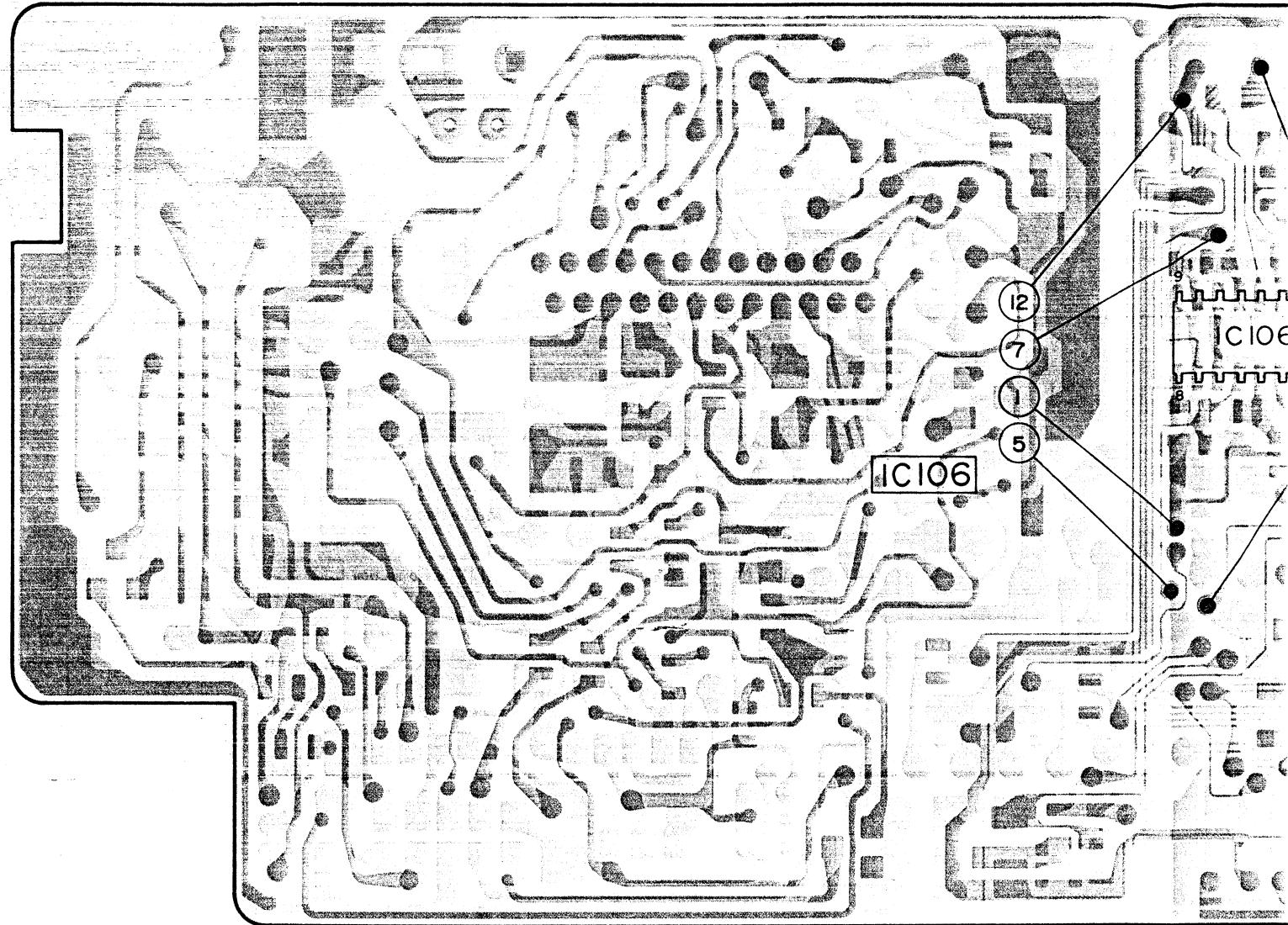
Mechaniksteuerung Schaltbild
Mechacon circuit diagram

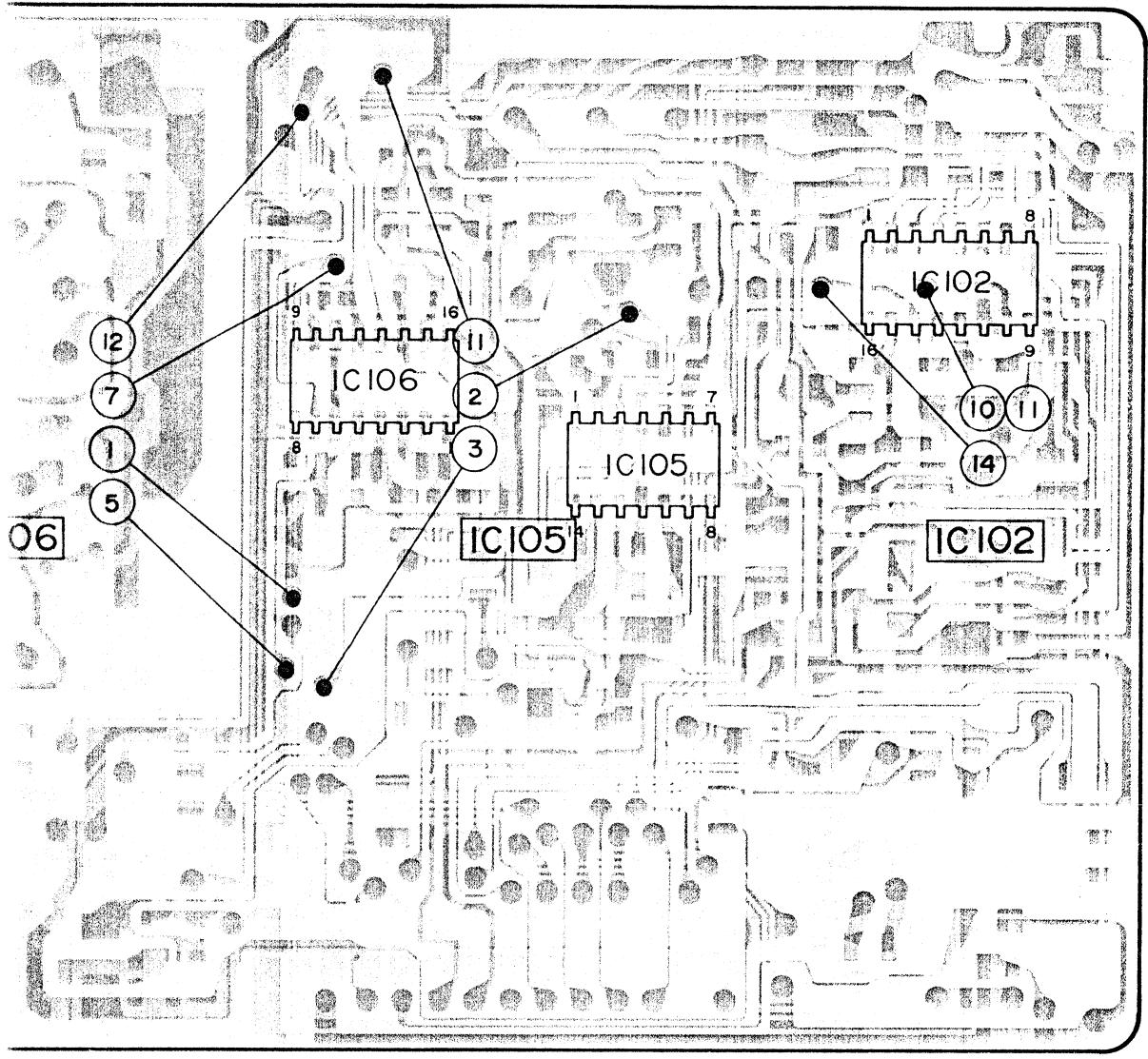




Mechaniksteuerung Schaltbild Mechacon circuit diagram



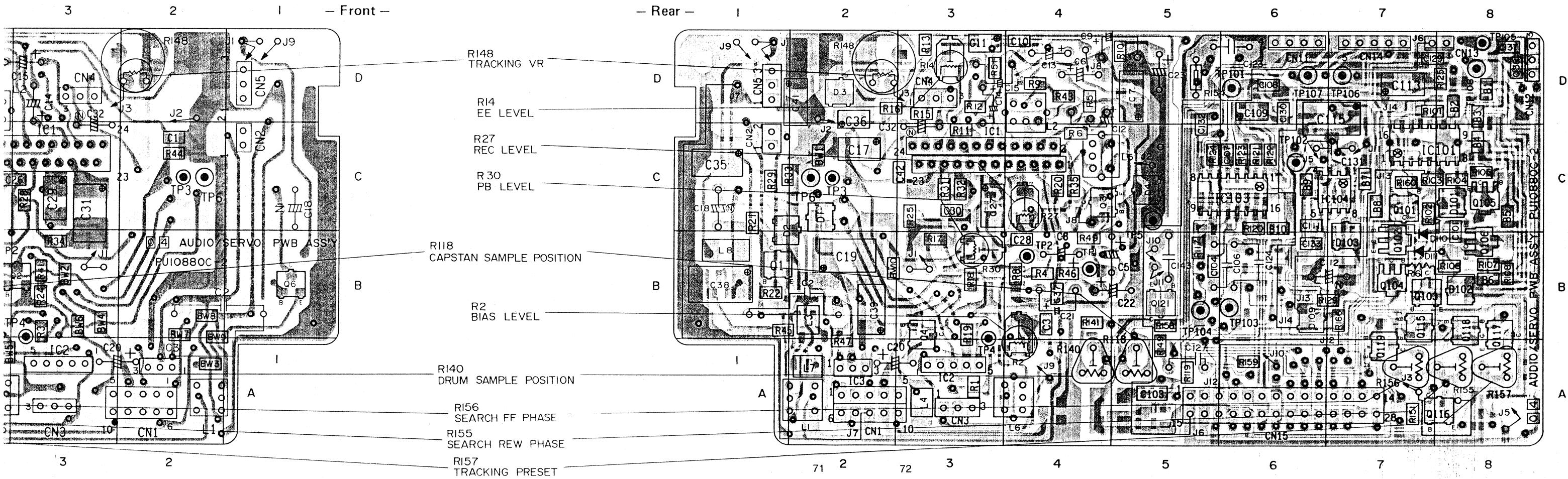
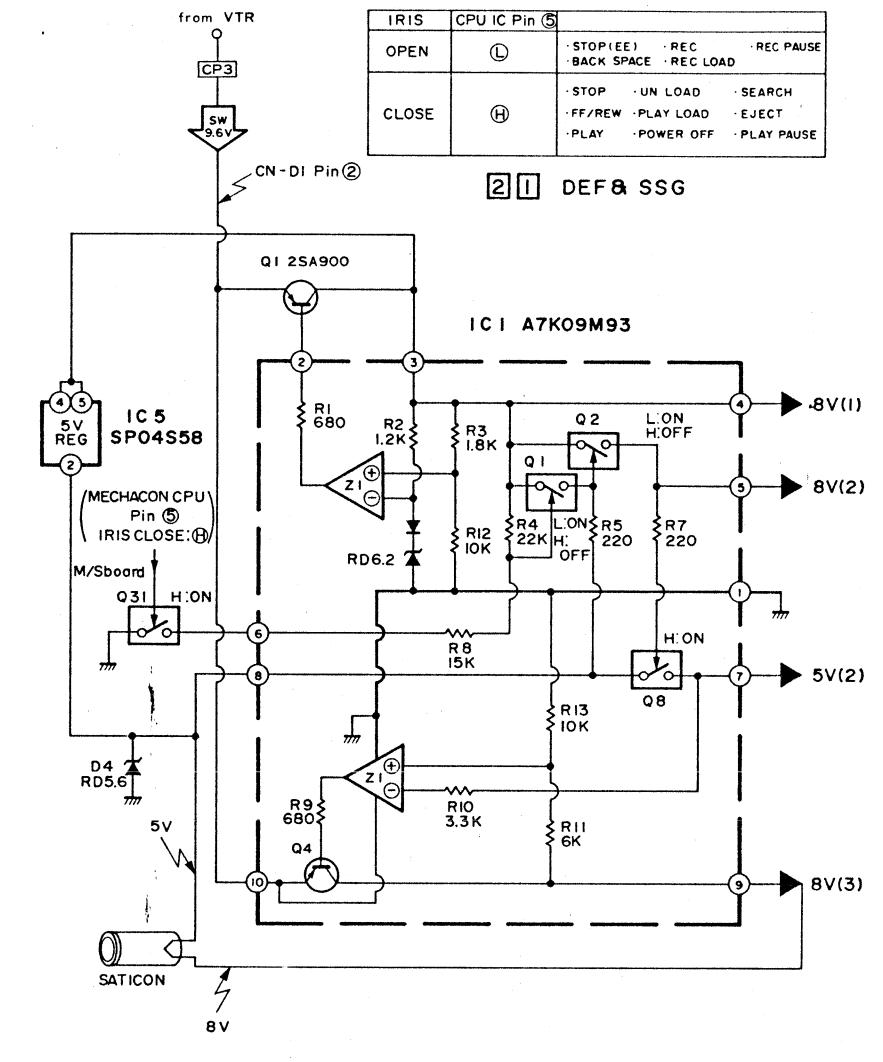




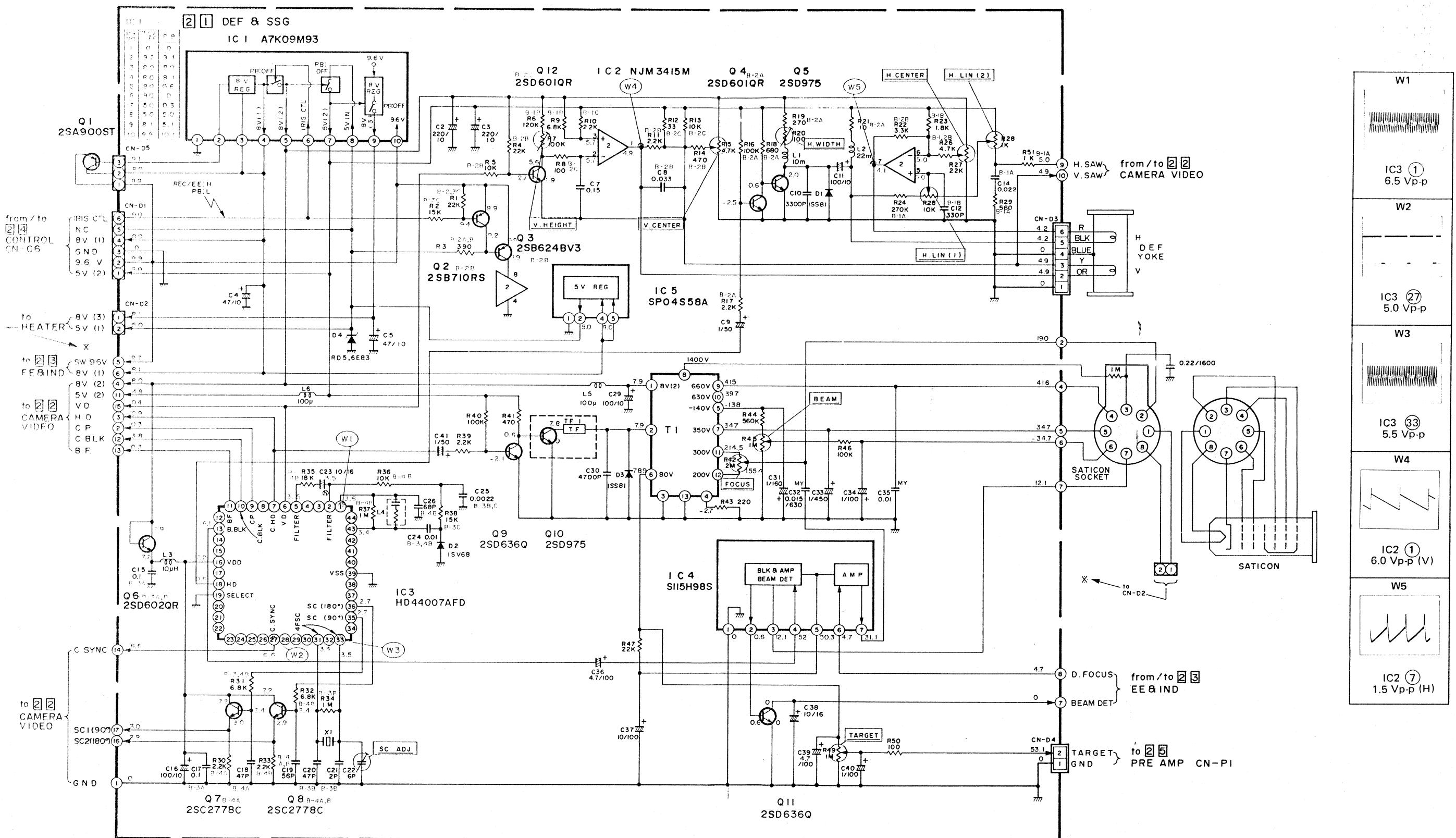
0 4 (Audio)-Servoplatte (IC-Anschlüsse)
(Audio)-Servo PWB (IC-pin tocation)

0 4 (Audio)-Servoplatte
(Audio)-Servo PWB

Funktion IC 1 (Ablenkplatte)
Function IC 1 (Def + SSG PWB)



2 | 1 Ablenkplatte Schaltbild
DEF + SSG circuit diagram



NOTES:

1. parts are importantly related to safety.
When replacing them, make sure to use specified parts.
2. Voltage and waveform measurements.
Voltage: Measured with digital voltmeter in DC range at iris closed.
Waveform: With greyscale completely filling the picture area at auto-iris.

Hinweis:

1. Alle Gleichspannungen sind mit einem Digital-Voltmeter gemessen, bei geschlossener Blende.
2. Oszilloskopogramme: Grautreppe, Blende auf Automatik.
3. Bauteile in schraffierte Flächen sind Sicherheits-Bauteile! Nur gegen Original-Ersatzteile wechseln!

NOTES: Unless otherwise specified.

1. All resistance values are in ohms.
2. All inductance values are in H.
3. All capacitance values are in μ F.

— : Chip capacitor

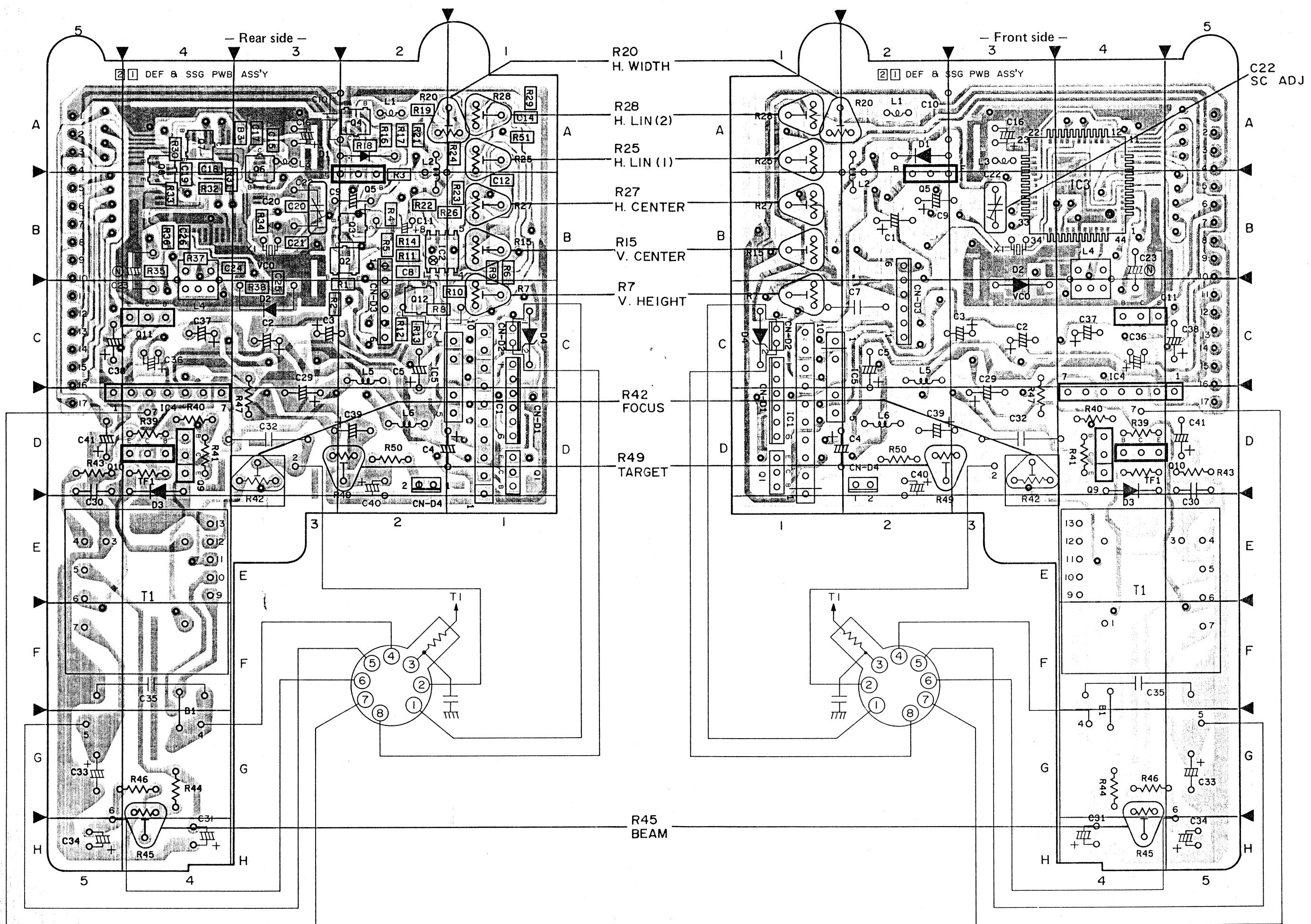
— : Electrolytic capacitor

— : Tantalum capacitor

— : Mylar capacitor

— : Non-polar capacitor

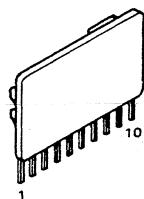
— : Polypropylene capacitor



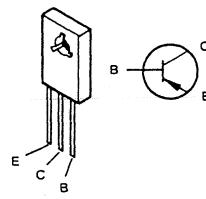
**2 1 Ablenkplatte
DEF + SSG PWB**

C22
SC ADJ

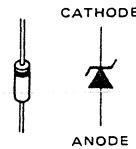
A7K09M93



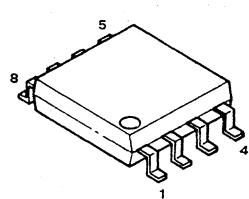
2SA900ST



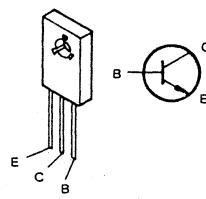
RD5.6EB3



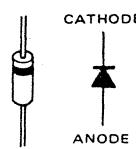
NJM3415M



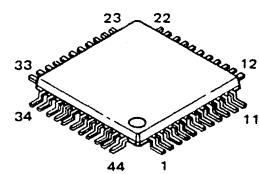
2SD975



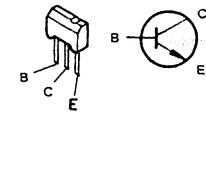
1SV68



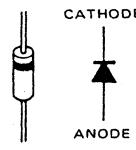
HD44007AFD



2SD636Q



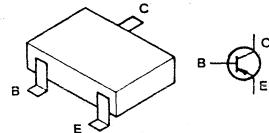
1SS81



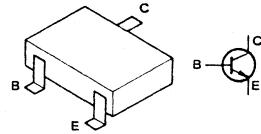
S115H98S



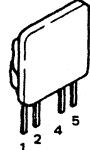
**2SB624BV3
2SB710RS**

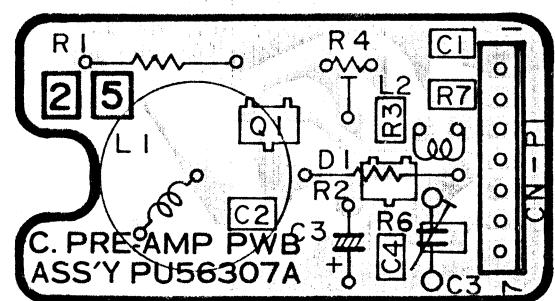
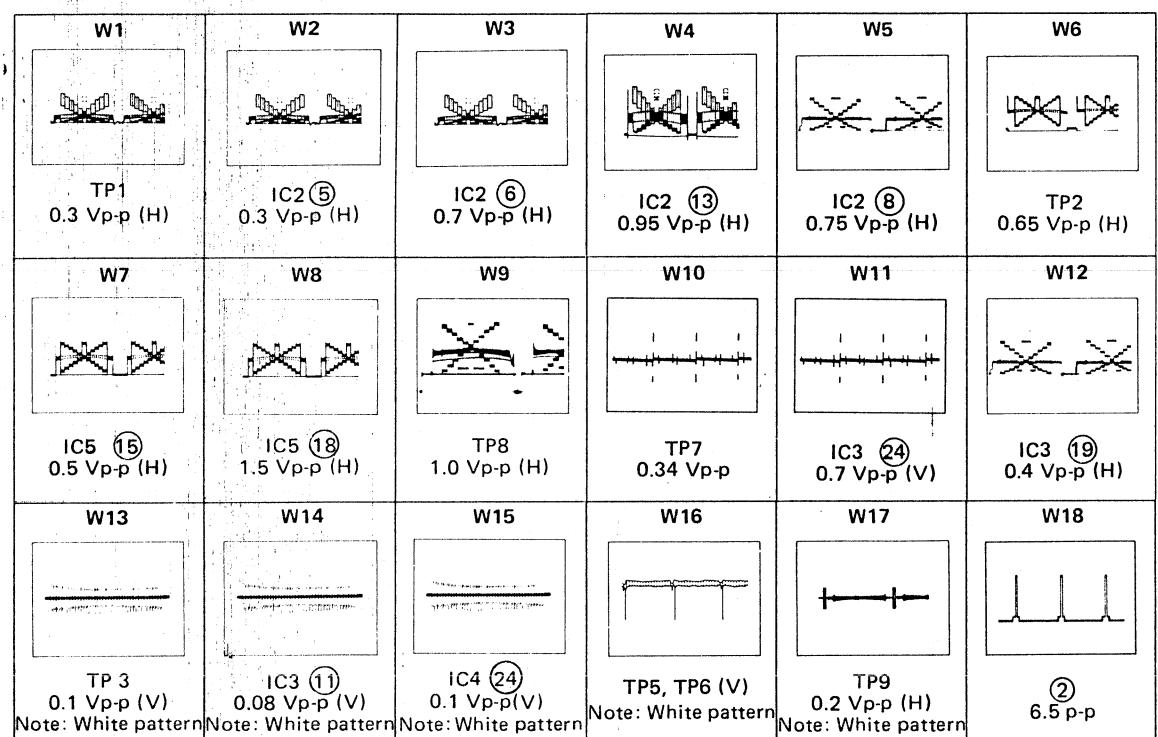


**2SC2778C
2SD601QR
2SD602QR**

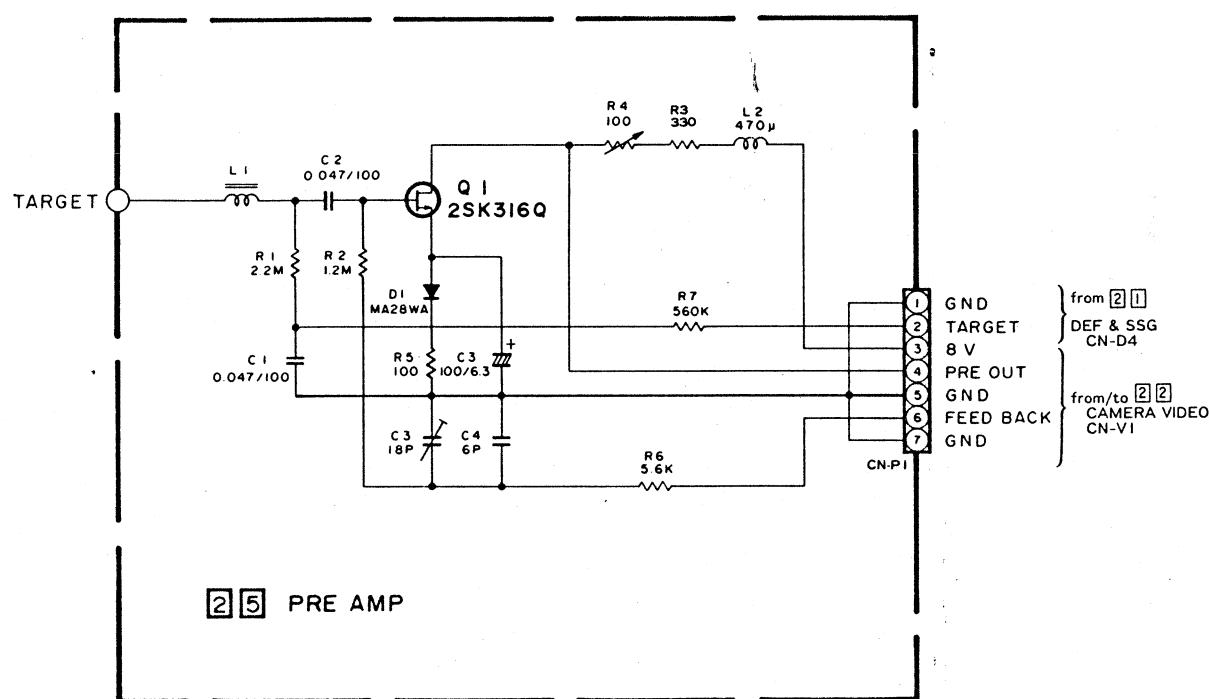


SP04S58A



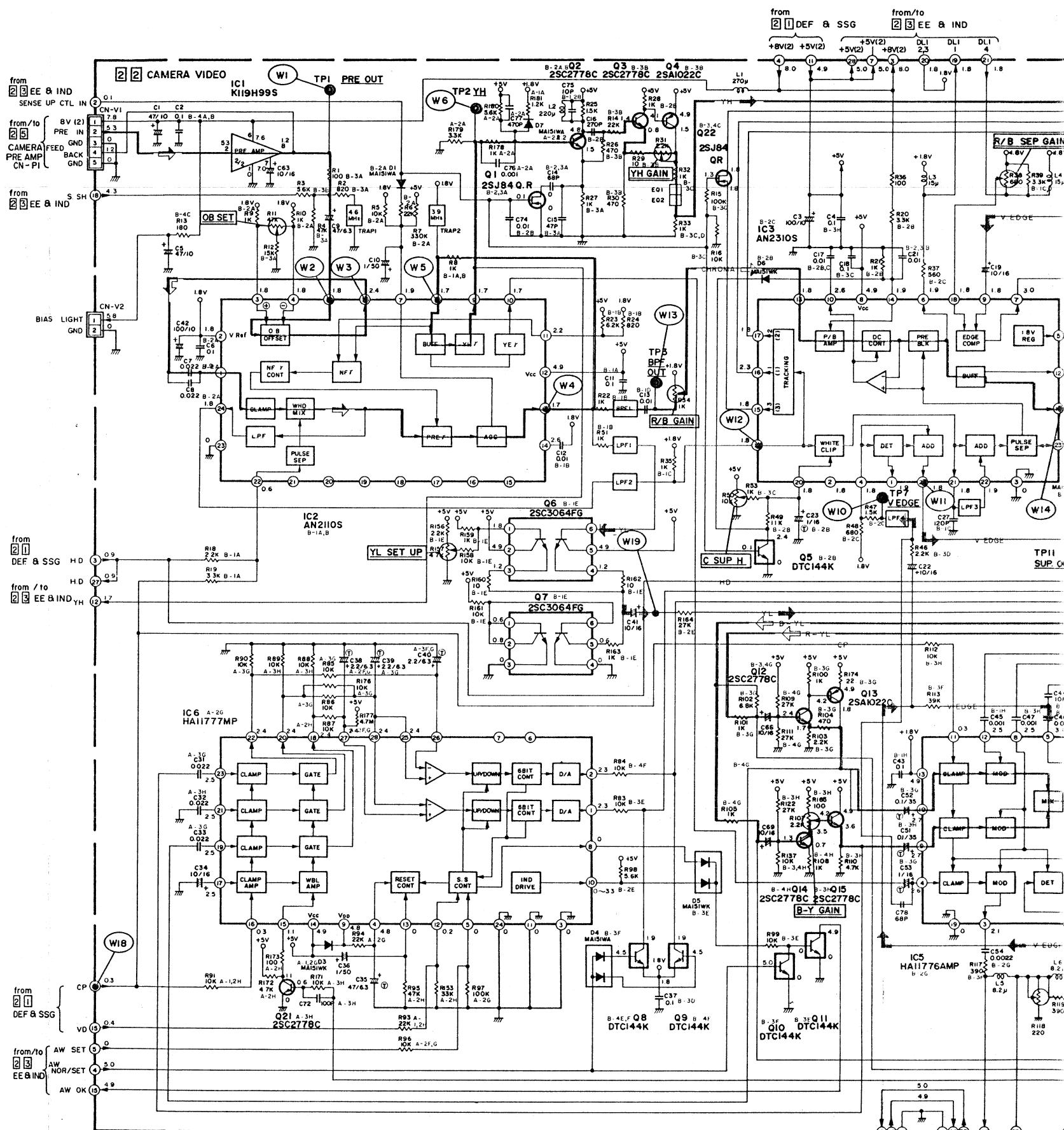


2 5 Vorverstärker
Preamplifier



NOTES: Camera amp R4 and C3 are adjusted at the factory.
Replace the entire camera pre-amp ass'y as a unit.
Readjustment of R4 and C3 is not required, even after replacing the Saticon.

Hinweise:
R4 und C3 sind fest eingestellt.
Ein Abgleich ist nicht erforderlich.

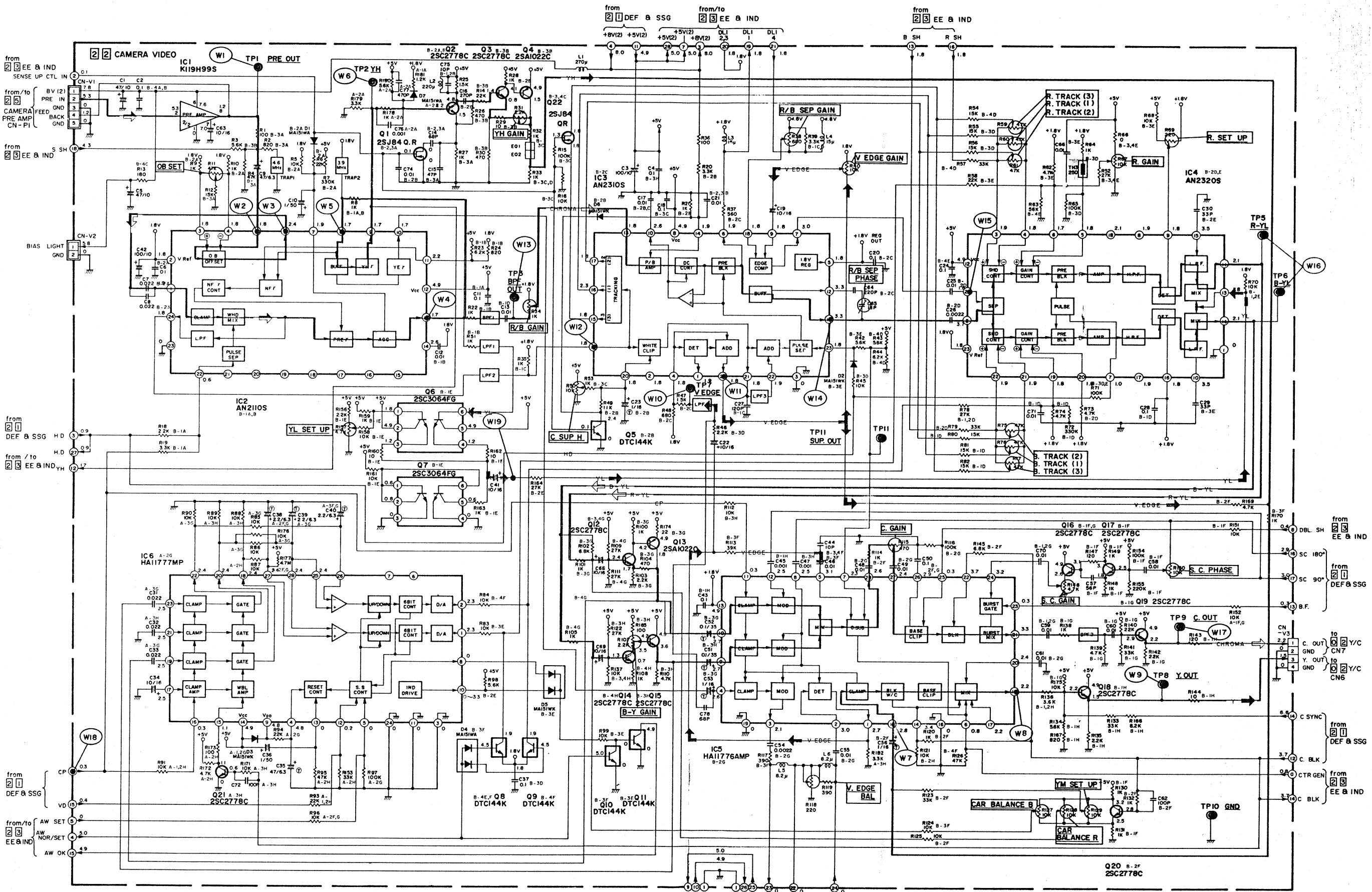


NOTES:
1. parts are importantly related to safety.
When replacing them, make sure to use specified parts.

2. Voltage and waveform measurements

Voltage: Measured with digital voltmeter in DC range at iris closed
Waveform: With greyscale completely filling the picture area at auto-iris

2 2 Videoplatte (Camera) Schaltbild
Video PWB (Camera) circuit diagram

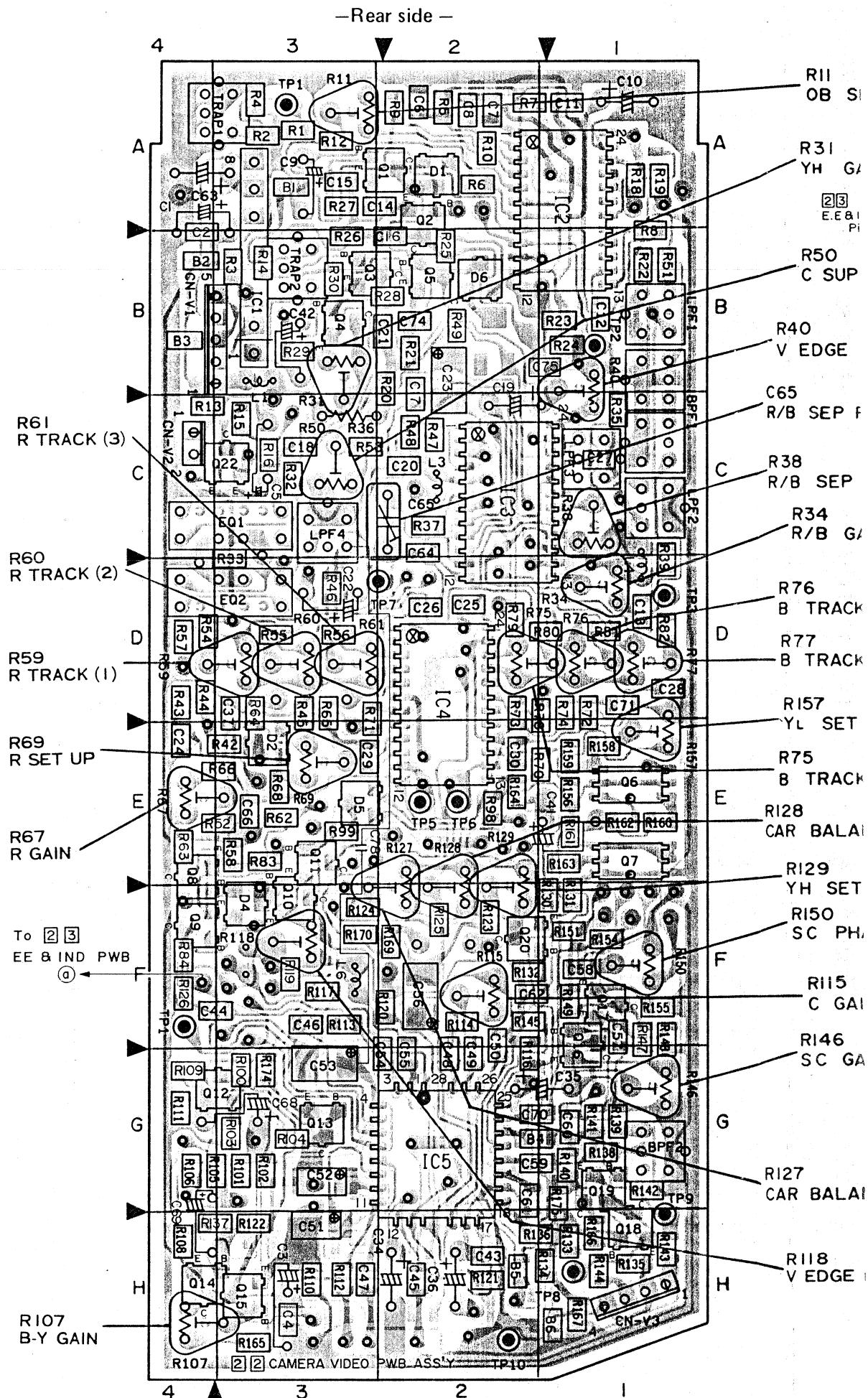
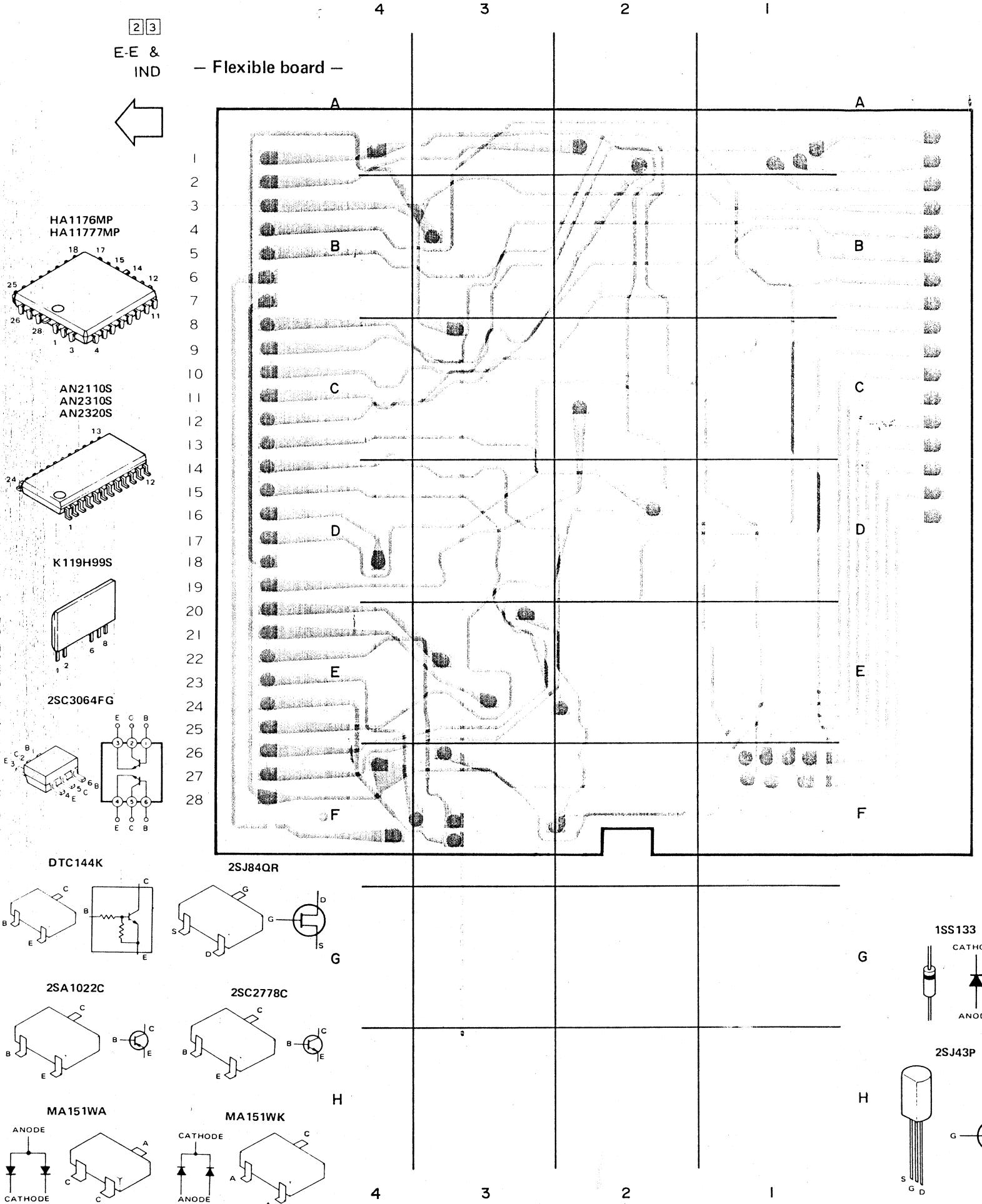


NOTES:

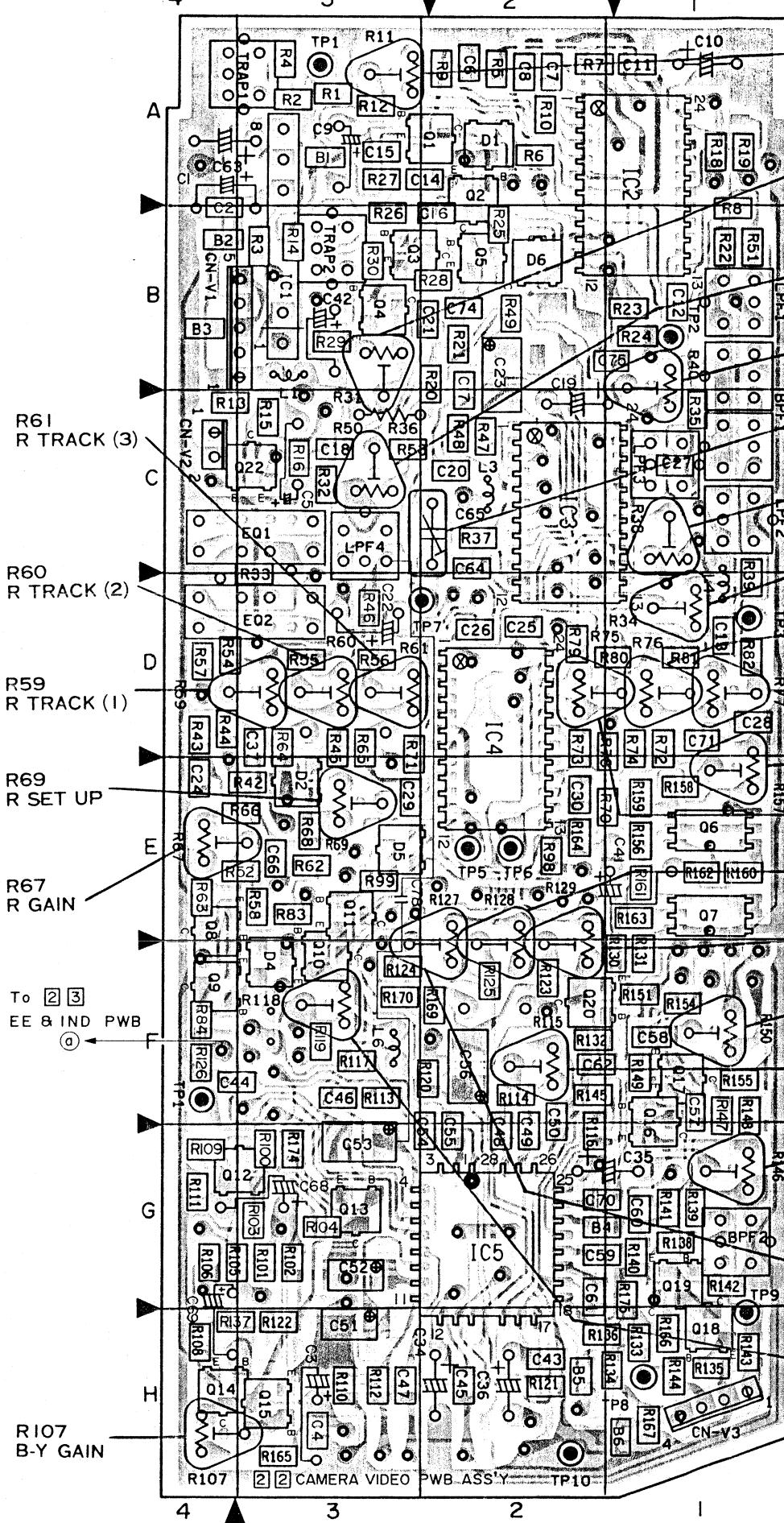
1. ~~parts~~ parts are importantly related to safety.
When replacing them, make sure to use specified parts.
2. Voltage and waveform measurements
Voltage: Measured with digital voltmeter in DC range at iris closed
Waveform: With greyscale completely filling the picture area at auto-iris

Hinweis:

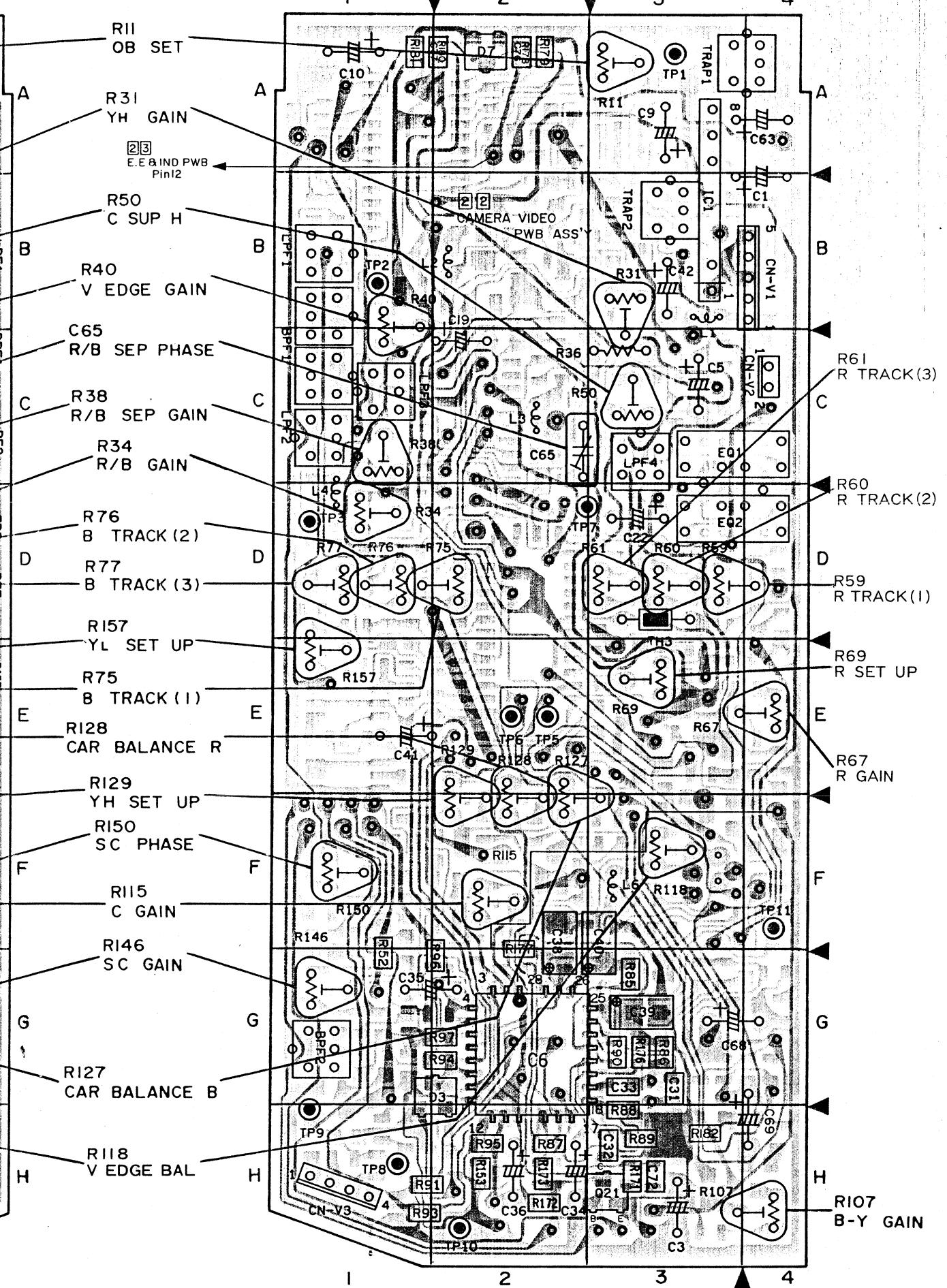
1. Alle Gleichspannungen sind mit einem Digital-Voltmeter gemessen. Blende geschlossen.
2. Oszilloskope: Grautreppe, Blende auf Automatik.
3. Bauteile in schattierten Flächen sind Sicherheitsbauteile! Nur gegen Original-Ersatzteile auswechseln!



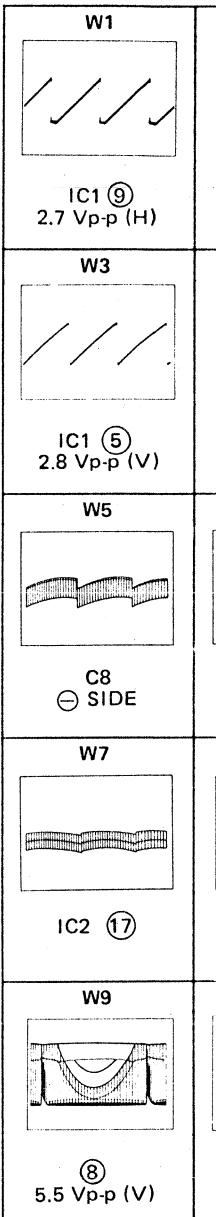
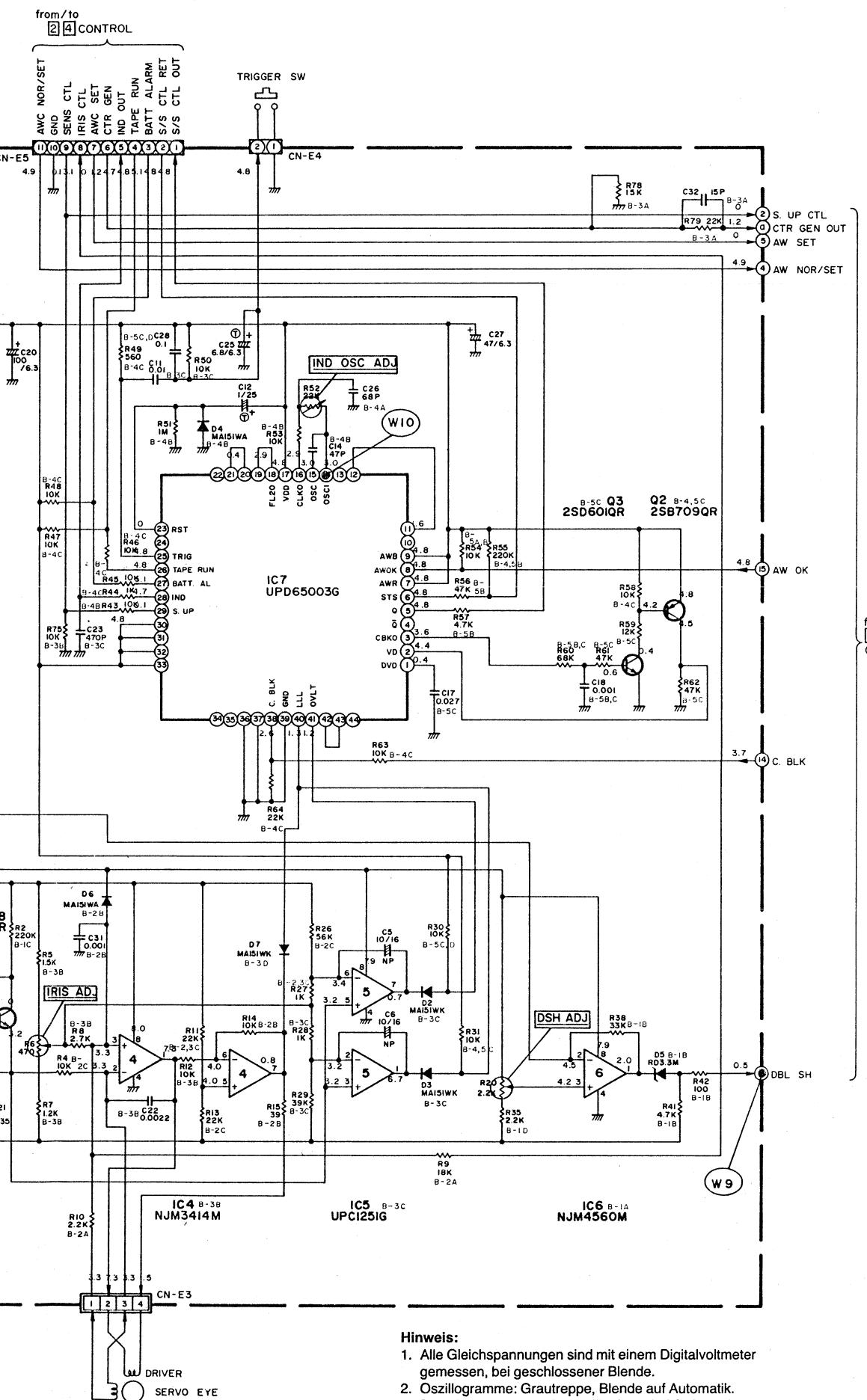
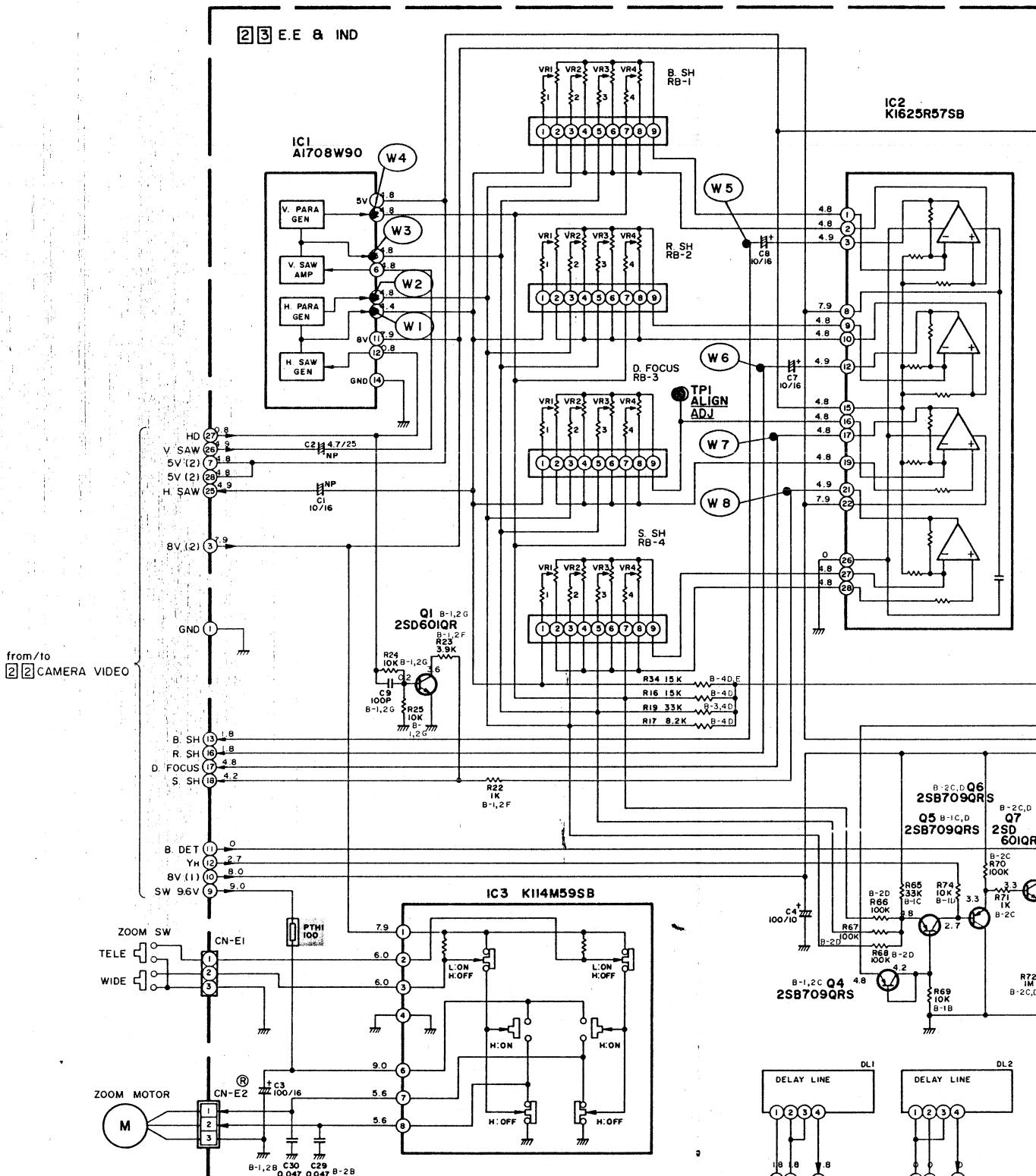
—Rear side—



—Front side—



2 3 E-E und Anzeigenplatte E-E and indicator

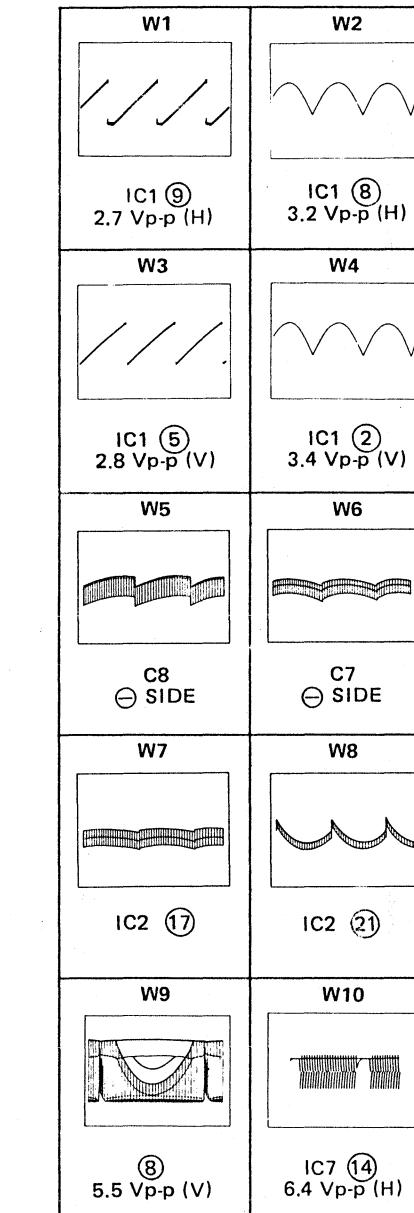
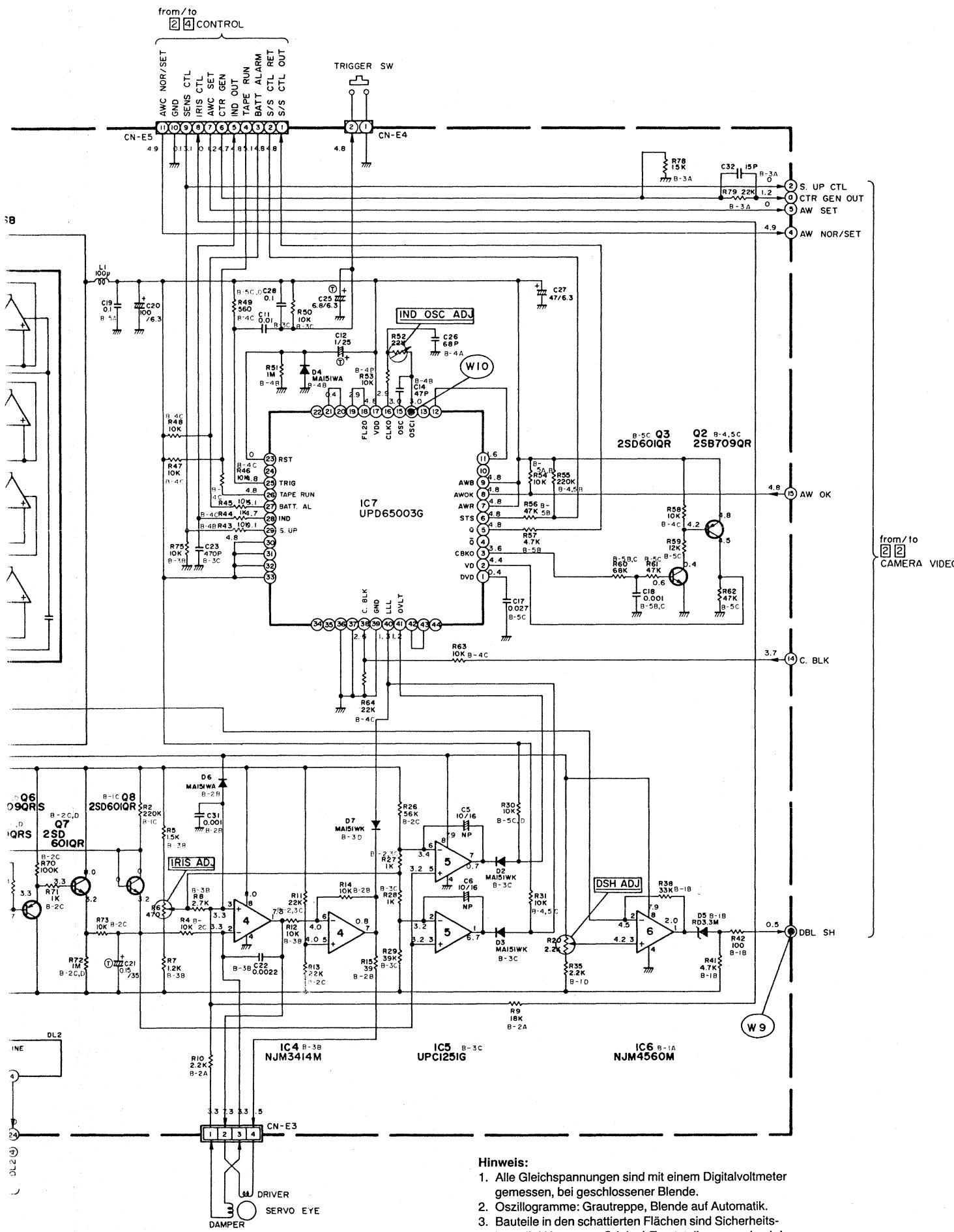


NOTES:

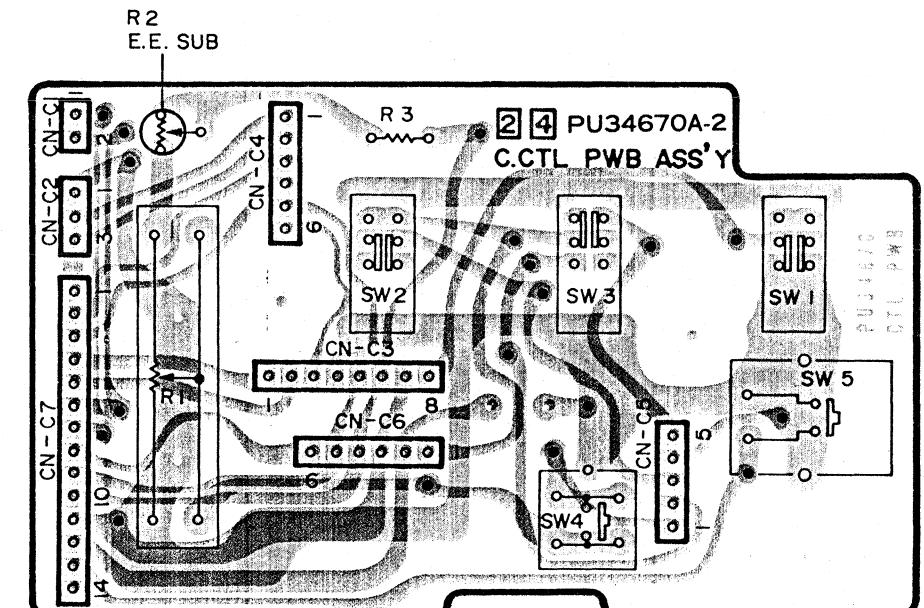
1. ~~important~~ parts are importantly related to safety.
When replacing them, make sure to use specified parts.
2. Voltage and waveform measurements.
Voltage: Measured with digital voltmeter in DC range at iris closed.
Waveform: With greyscale completely filling the picture area at auto-iris.

Hinwe

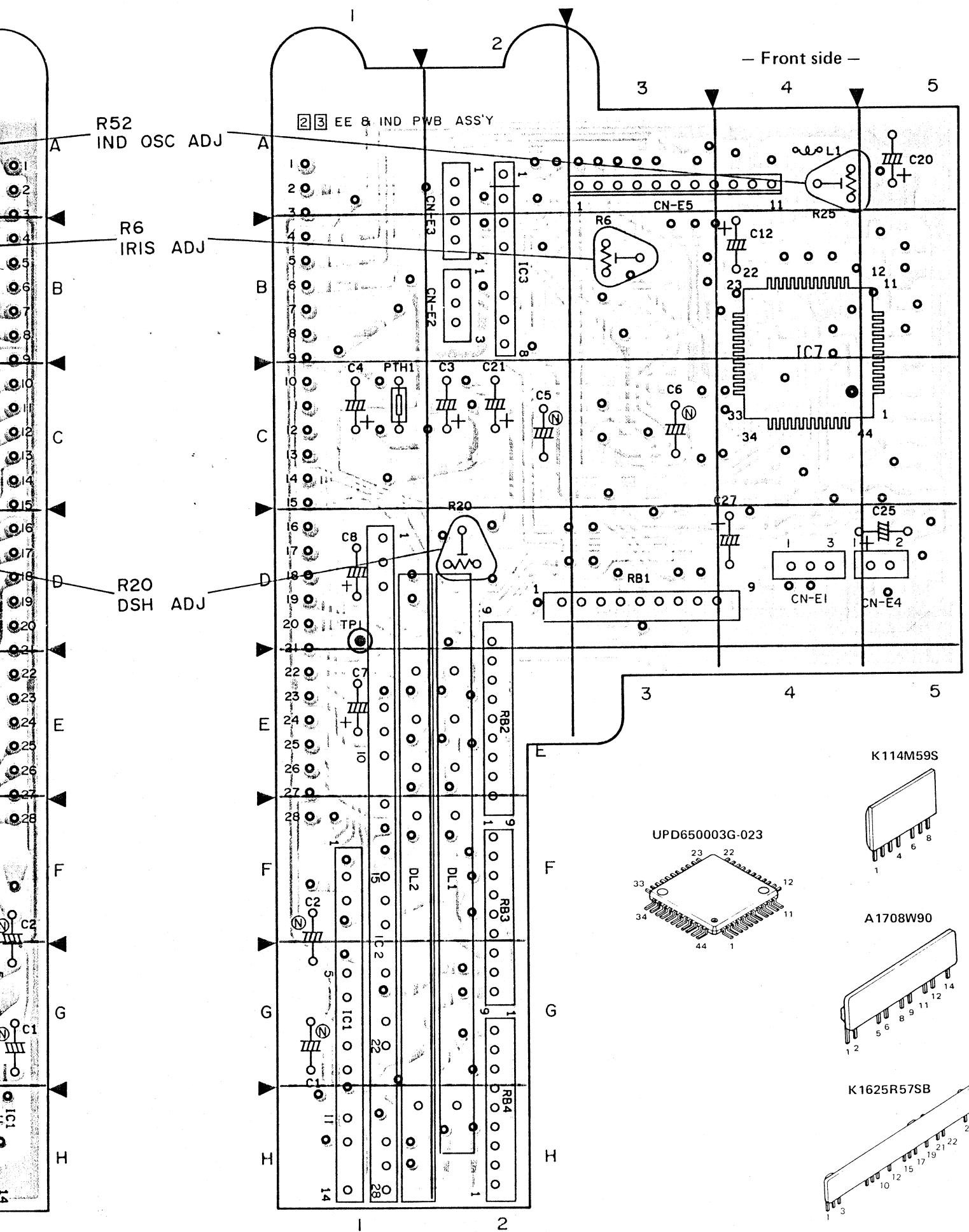
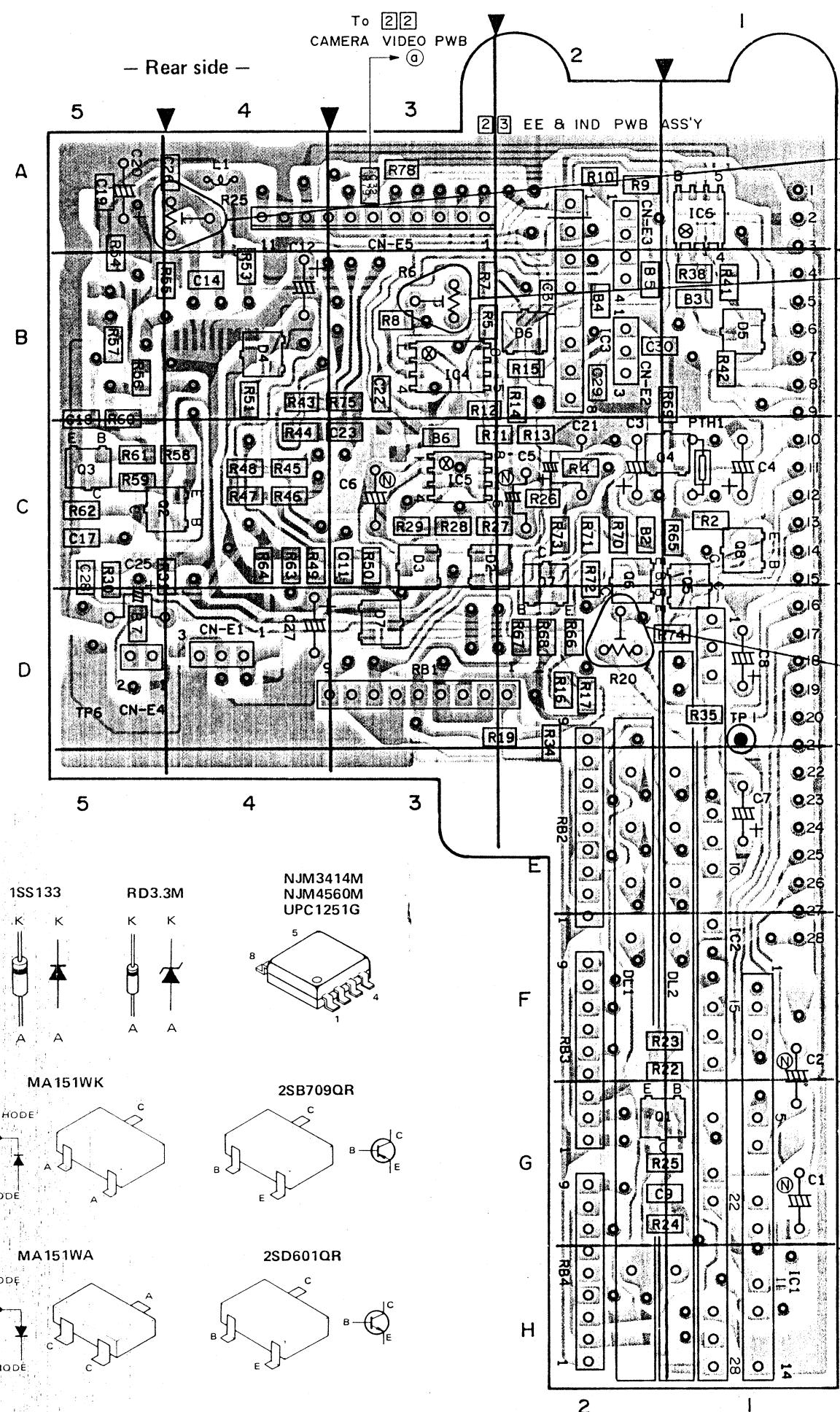
1. Alle Gleichspannungen sind mit einem Digitalvoltmeter gemessen, bei geschlossener Blende.
2. Oszillogramme: Grautreppe, Blende auf Automatik.
3. Bauteile in den schattierten Flächen sind Sicherheitsbauteile! Nur gegen Original-Ersatzteile auswechseln!

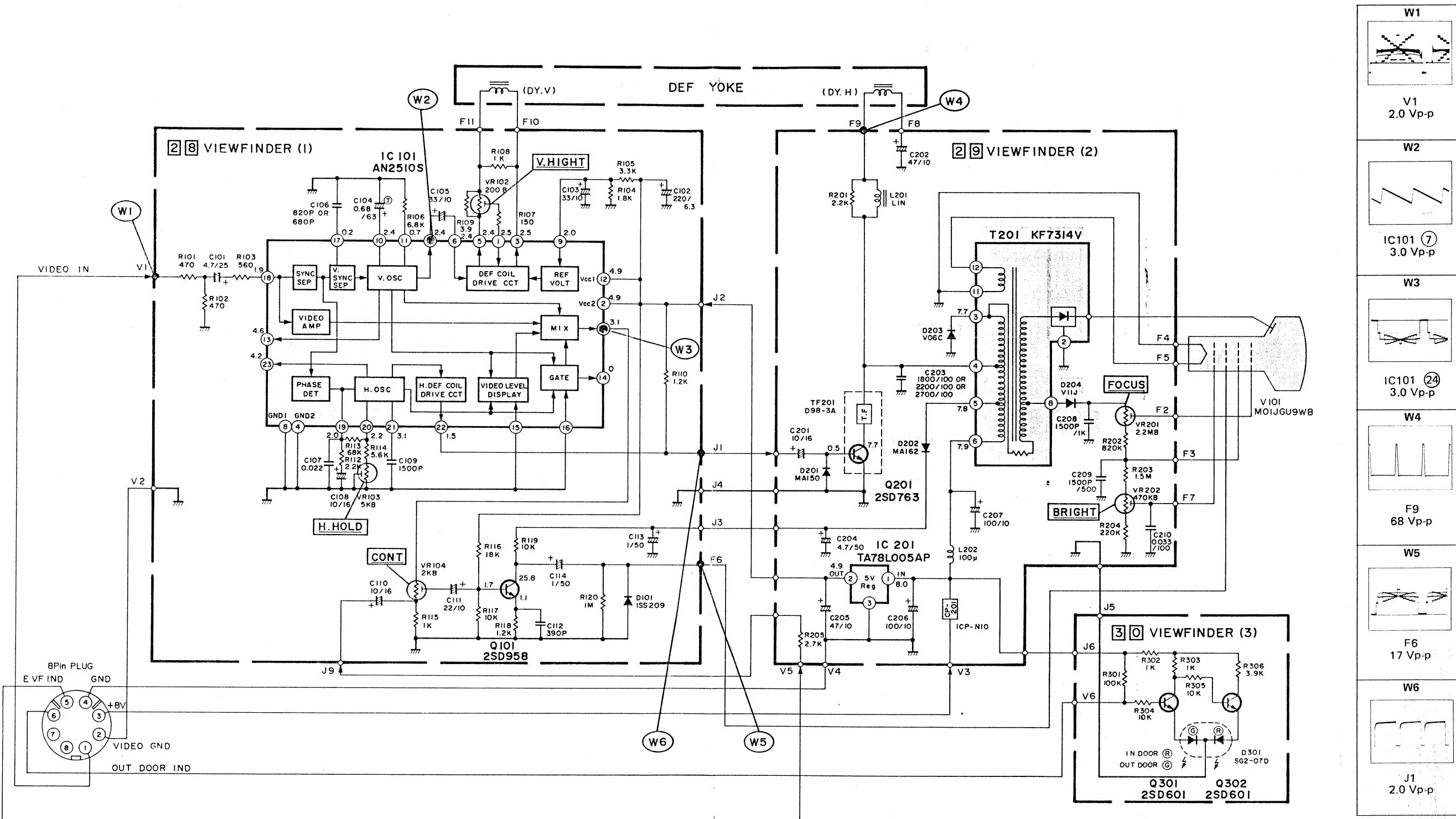


**2 4 Camera Schalterplatte
Camera control PWB**

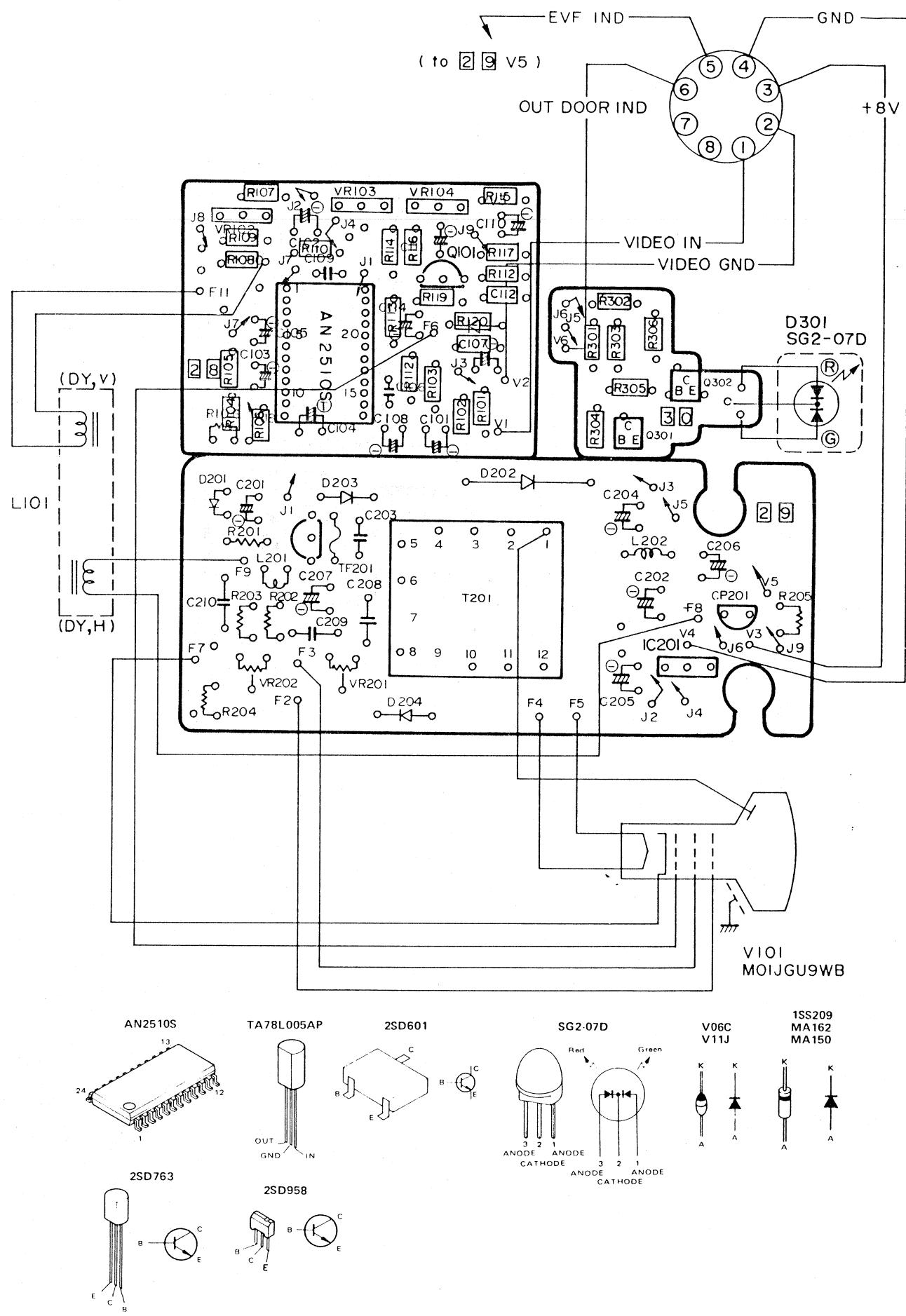


2 3 E-E und Anzeigeplatte E-E and indicator PWB

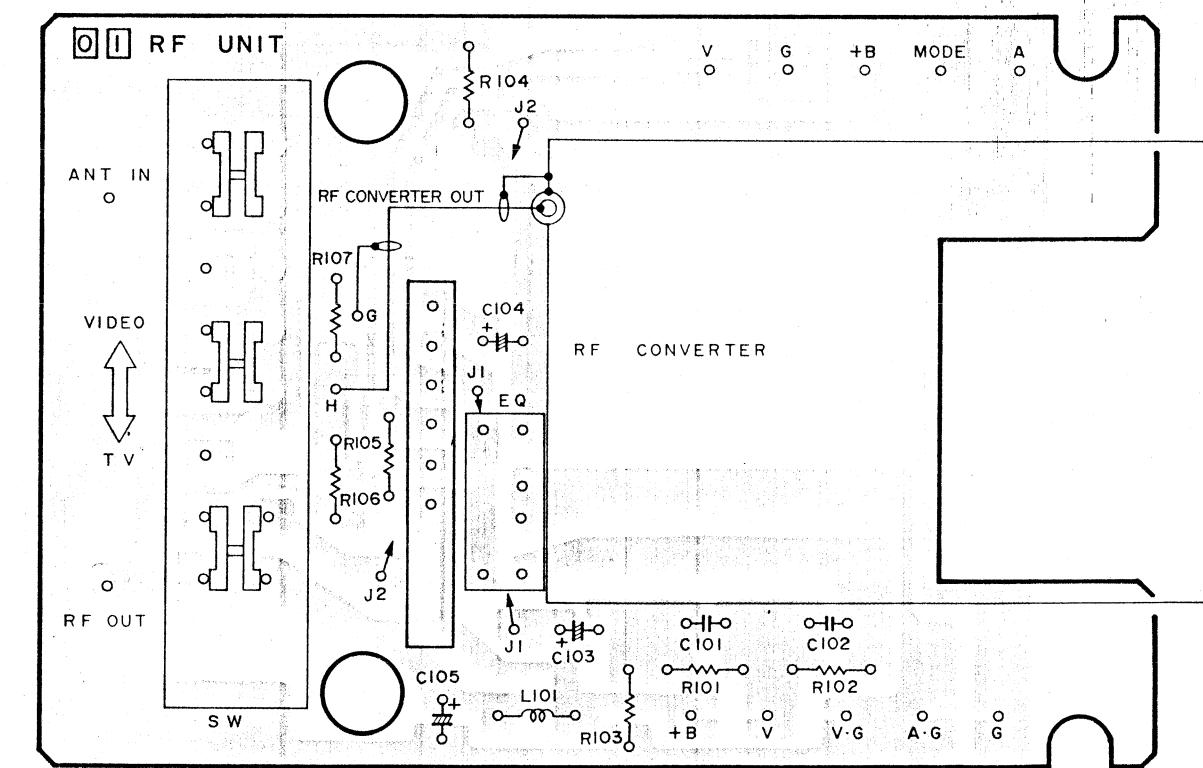
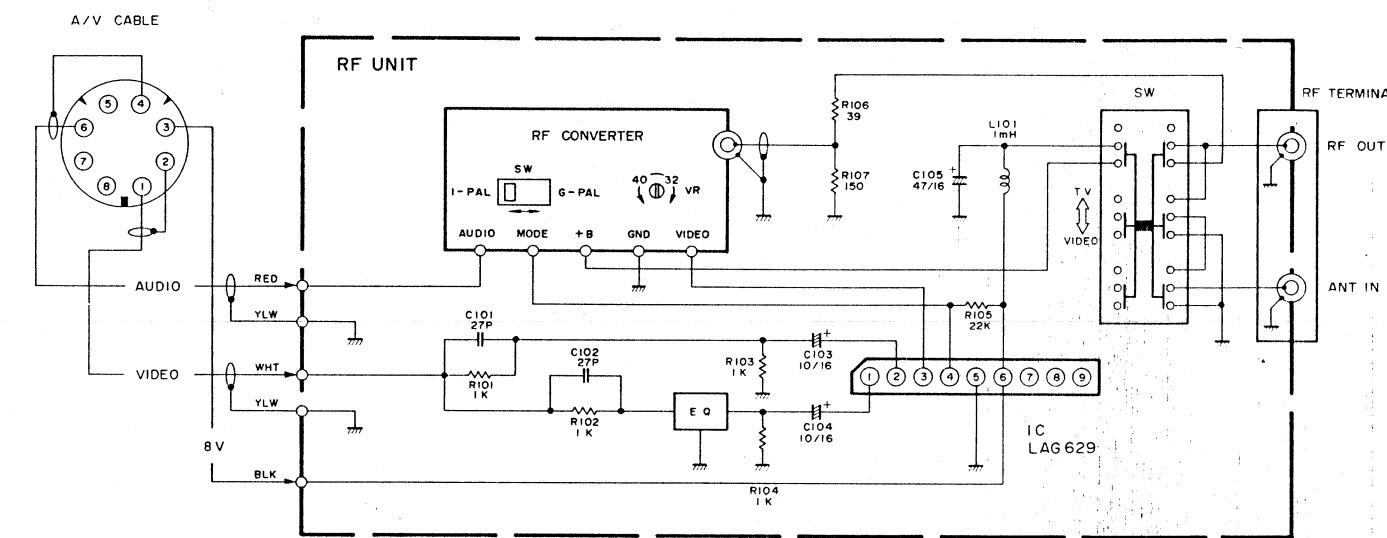




2 8 , 2 9 , 3 0 elektron. Sucher
Viewfinder



HF-Modulator RF-Unit



Netz- und Ladegerät AC power adaptor and battery charger

SCHEMATIC DIAGRAM

NOTES: Unless otherwise specified;

1. All resistance values are in ohms, 1/8 W.

2. All inductance values are in μ H.

3. All capacitance values are in μ F.

— Electrolytic — Ceramic

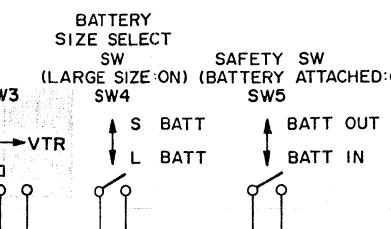
— Tantalum — Mylar

4. Voltages are DC-measured with a digital voltmeter during STOP mode

1) Voltages during REC mode is shown in parentheses ();
(SW3: VIDEO, SW4: OFF, SW5: OFF, Ground: CN6 pin 1)

2) Voltages during CHG mode at nor road is shown in frame ();
(SW3: CHG, SW4: OFF, SW5: ON, Ground: CN6 pin 1)

5. Shaded () parts are critical for safety.
Replace only with specified parts numbers.



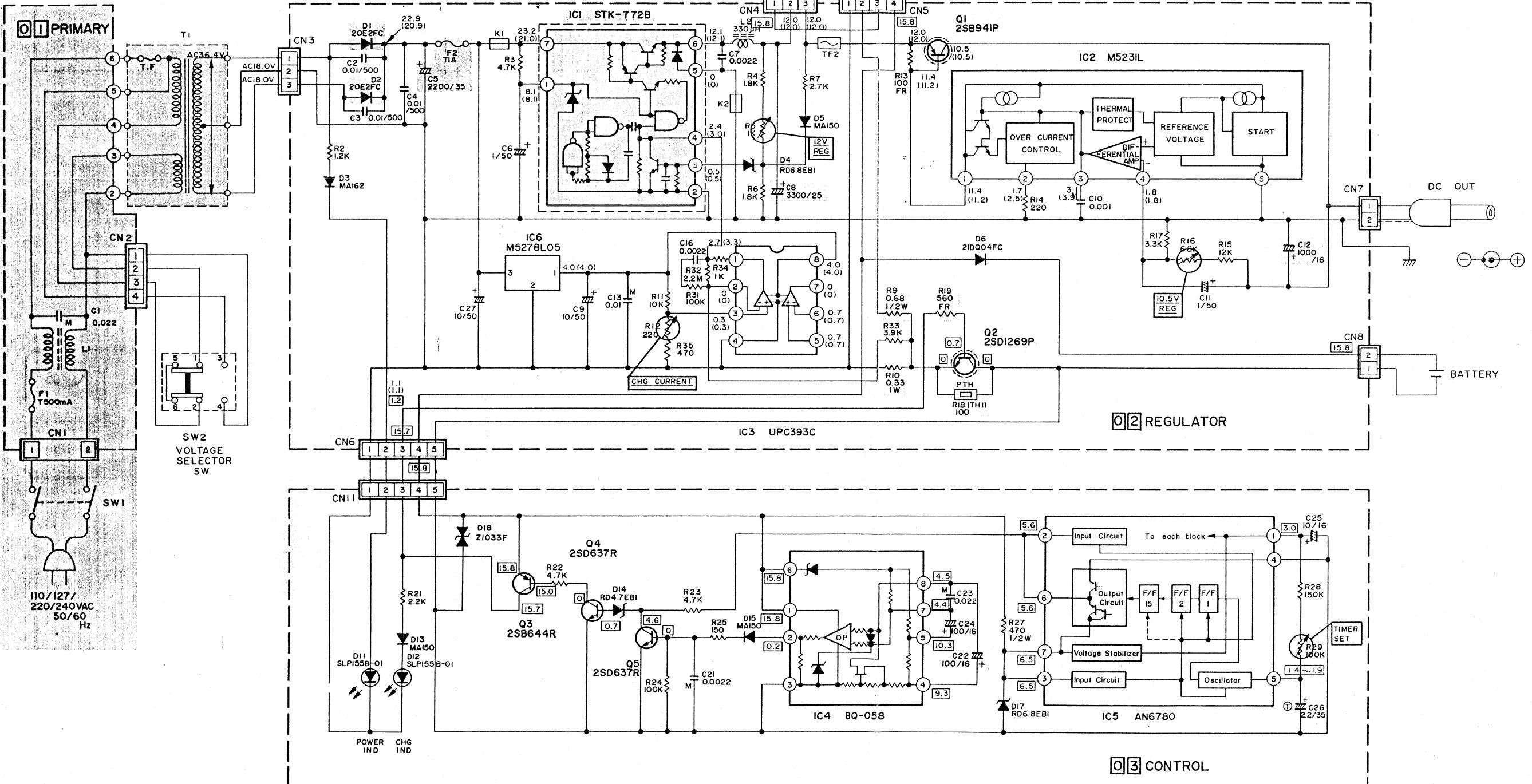
Hinweis:

1. Alle Gleichspannungen sind mit einem Digitalvoltmeter im Stop-Betrieb gemessen.

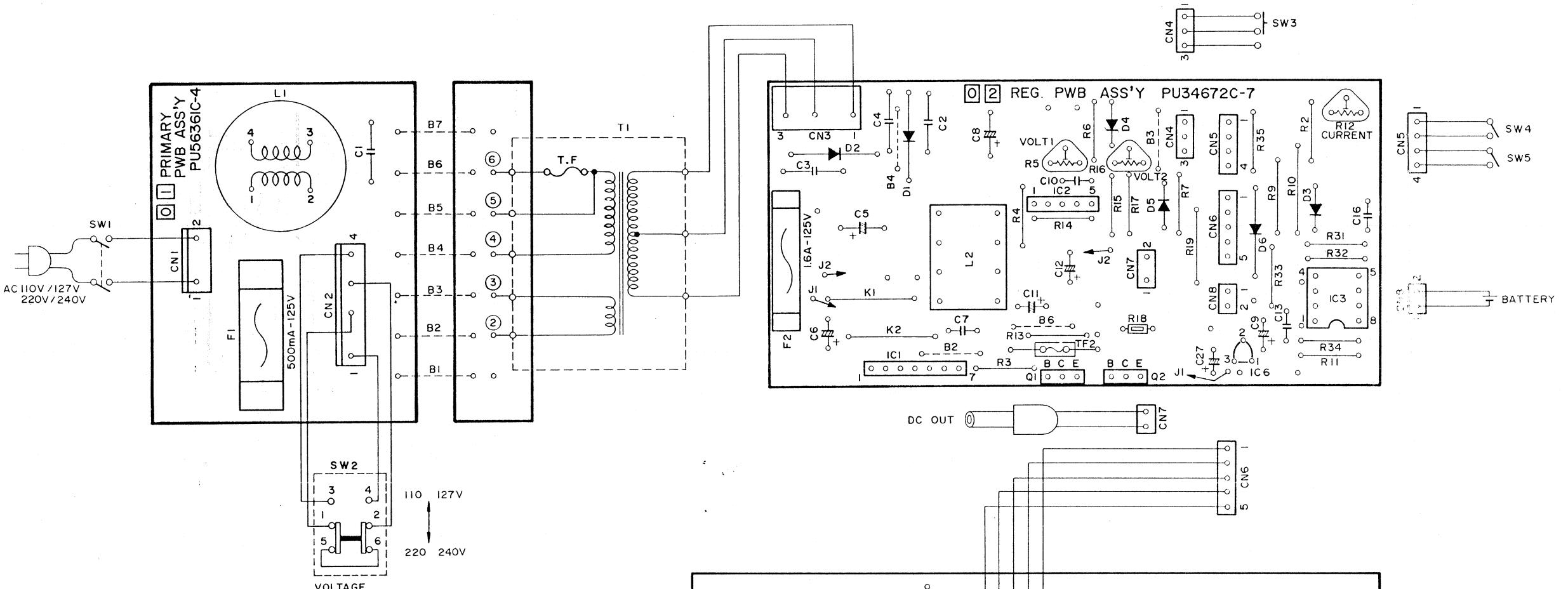
2. Spannungen in Klammern () sind im Aufnahme-Betrieb ohne Belastung gemessen. (SW 3: Video, SW 4: aus, SW 5: aus, Masse: CN6/Pin 1)

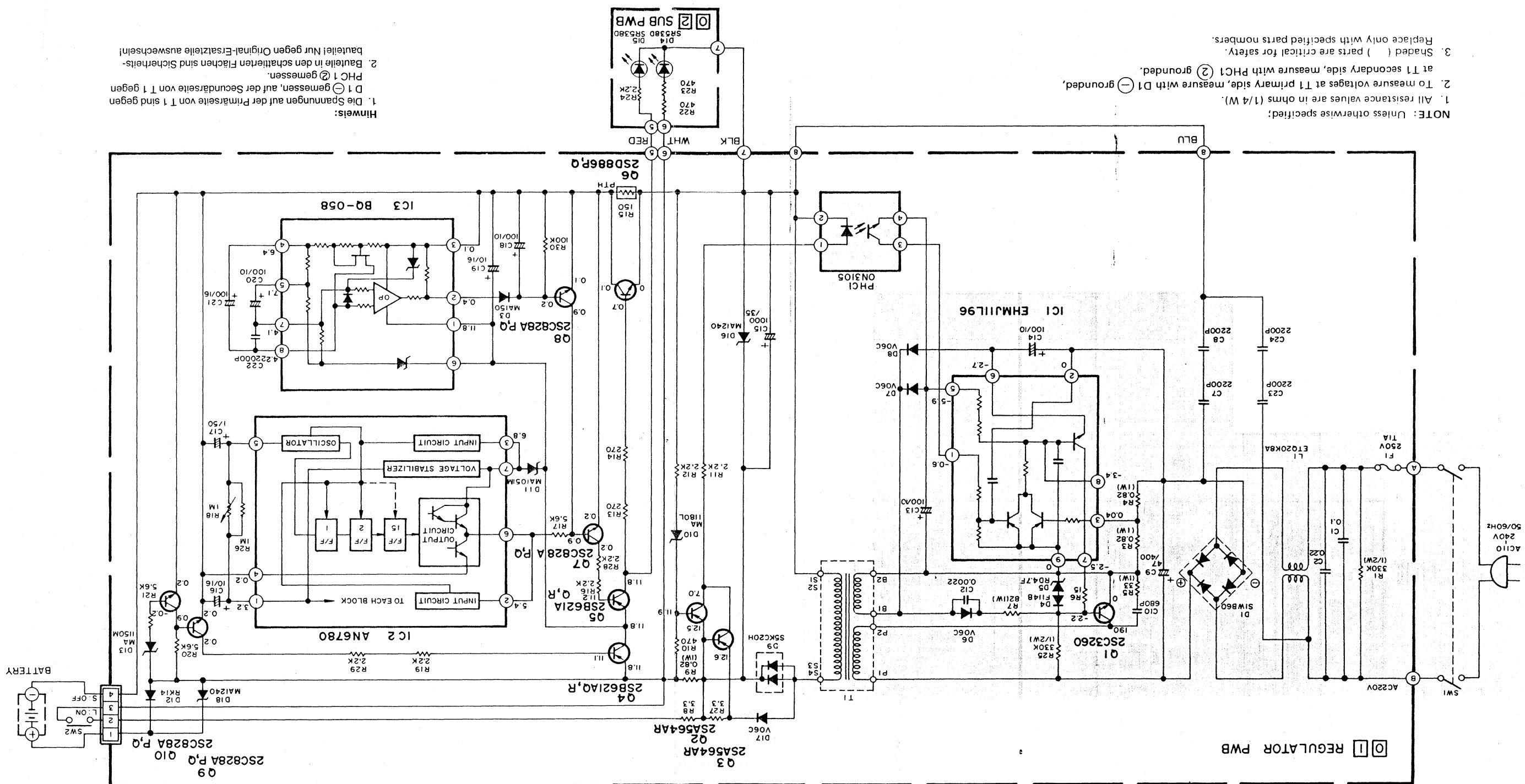
3. Eingerahmte Spannungen sind im Lade-Betrieb gemessen. (SW 3: CHG, SW 4: aus, SW 5)

4. Bauteile in den schattierten Flächen sind Sicherheitsbauteile! Nur gegen Original-Ersatzteile wechseln!



Netz- und Ladegerät
AC power adaptor and battery charger

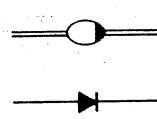




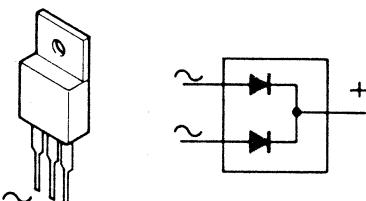
AKKU-Ladegerät Battery charger

Akku-Ladegerät Battery charger

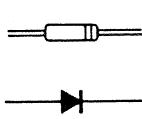
D6, D7, D8, D17 : V06C
D4 : F114B



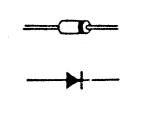
D9 : S5KC20H



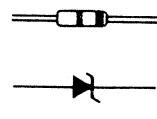
D3 : MA150



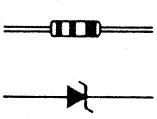
D12 : RK14



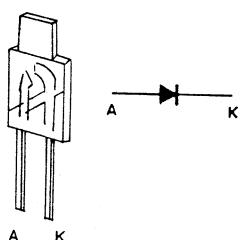
D10 : MA1180L
D13 : MA1150M
D16 : MA1240



D11 : MA1051M



D14, D15 : SR538D



D5 : RD4.7F

